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AUGUST 1956

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*From the Foreword to the first issue:*

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The authors of the papers in this issue have received considerable assistance from their colleagues on the staff of the Fund. This general statement of indebtedness may be accepted in place of a detailed list of acknowledgments.

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INTERNATIONAL
MONETARY FUND

# STAFF PAPERS

Vol. V August 1956 No. 2

# Quotas in the International Monetary Fund

**Oscar L. Altman***

ONE OF THE KEY ELEMENTS of the International Monetary Fund, agreed at Bretton Woods, was the multipurpose quota.[1] The purpose of this paper is to describe the role and the operating significance of Fund quotas. This will be done by examining (1) the nature of and the relation between the functions ascribed to quotas, (2) the determination of quotas for original members at Bretton Woods and for the members admitted after the Fund commenced operations, (3) the adequacy of quotas, in the light of their functions and of economic developments since Bretton Woods, and (4) the adjustment and review of quotas.

## Functions of Fund Quotas

Each member of the Fund has a quota, the functions of which are threefold. These functions are interrelated, but the attempt to find a series of figures that would effectively perform all of these functions for each member necessitated a large amount of compromise in the determination of quotas. This in turn increased the difficulties of changing them later.

### Quotas, Member Subscriptions, and Fund Resources

A quota determines the subscription or contribution of each member to the capital of the Fund; and the total of the quotas of all members

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[1] There is an extensive literature on the Bretton Woods Agreements and on the Fund in general, but no extended treatment of quotas. The literature is covered in four bibliographies: Board of Governors of the Federal Reserve System (Library), *Bretton Woods Agreements: A Bibliography, April 1943–December 1945;* Martin L. Loftus, "The International Monetary Fund: A Selected Bibliography," *Staff Papers*, Vol. I, No. 3 (April 1951), Vol. III, No. 1 (April 1953), and Vol. IV, No. 3 (August 1955). The official record of the Bretton Woods Conference is given in *Proceedings and Documents of United Nations Monetary and Financial Conference, Bretton Woods*, published by the U. S. Department of State in 1948 in two volumes. (This is hereafter cited as *Proc. Bretton Woods.*) Vol. II contains the drafts of the various proposals that preceded the Fund's Articles of Agreement.

determines the size of the Fund's financial resources. Each member is required to pay to the Fund part (not exceeding 25 per cent) of its quota in gold, and the balance in its own currency. The required gold payment was defined as the smaller of 25 per cent of its quota or 10 per cent of its net official holdings of gold and dollars.[2] The latter alternative was inserted in the Bretton Woods Agreement, at a late stage in the negotiations, to ensure that no member would be required to pay an excessive proportion of its gold reserves to the Fund. Under this alternative, a member might initially pay less than 25 per cent of its quota in gold, or even, if it had no net official holdings of gold and dollars, no gold at all. Several of the "original" members availed themselves of this alternative, and the conditions of membership for several "new" members admitted to the Fund after 1946 provided for initial gold payments of less than 25 per cent of quota.[3] In addition, members have the option of substituting noninterest-bearing nonnegotiable notes, payable to the Fund at their par value on demand, for the part of the Fund's holdings of their currency which exceeds 1 per cent of quota. Members have generally availed themselves of this option, and more than 85 per cent of the non-gold assets of the Fund are in the form of demand notes or obligations. Total assets are equal to the total quotas adjusted for the cumulative profit and loss from operations; on April 30, 1956, they amounted to about $8.7 billion, consisting of the following:[4]

| | Billion U.S. Dollars | Per Cent of Total |
|---|---|---|
| Gold | 1.8 | 21 |
| Convertible currencies and securities | 2.1 | 24 |
| Nonconvertible currencies and securities | 4.0 | 46 |
| All other (subscriptions receivable, not due pending establishment of par value) | 0.8 | 9 |

The percentage of the Fund's assets in the form of nonconvertible currencies[5] increased from 39 on April 30, 1947, the end of the Fund's first

[2] Article III, Section 3(b).

[3] As of January 31, 1956, 54 out of 58 members had completed their gold payment requirements. Of these, 24 had paid at the rate of less than 25 per cent of quota: 14 original members—Australia, Chile, Costa Rica, Denmark, Egypt, France, India, Iraq (which was not required to pay any gold), Lebanon, Luxembourg, Peru, Syria, United Kingdom, and Yugoslavia; and 10 new members—Austria, Burma, Ceylon, Ethiopia, Finland, Federal Republic of Germany, Indonesia, Jordan, Pakistan, and Sweden. Thirty members paid 25 per cent of their quotas in gold, and 4 had not completed their gold payments: China, Greece, Italy, and Uruguay. (*International Financial Statistics*, December 1955, p. 4.)

[4] The cumulative deficit to date is about $12 million.

[5] The terms "convertible" and "nonconvertible" have specific meanings under the Articles of Agreement: "convertible currencies, within the meaning of the Fund Agreement, are currencies of those members that are not availing themselves of the transitional arrangements that permit the maintenance and adaptation to changing circumstances of restrictions on payments and transfers for current

fiscal year, to 46 on April 30, 1956. On the other hand, the percentage of gold also increased, from 17 to 20. With one exception, the members that have joined the Fund since its foundation have nonconvertible currencies, but in proportion they have paid a larger part of their quotas in gold than did the original members.[6]

Apart from any retained profits or accumulated losses, quotas directly determine the total assets of the Fund. Generally speaking, assets can be increased only by admitting new members or by increasing the quotas of existing members, though the Fund may under prescribed conditions increase the funds at its disposal by borrowing.[7]

Quotas did not determine either the exact amount of gold with which the Fund began operations, or the distribution of its holdings as between convertible and nonconvertible currencies. Nevertheless, the Fund's repurchase provisions, in their relation to members' quotas, were designed gradually to increase the amount of the Fund's holdings of gold and convertible currencies as well as to assure that its assets were kept on a revolving basis.[8] The proportion of the Fund's assets that consists of convertible currencies would, of course, increase as more members made their currencies convertible. In addition, the repurchase provisions tend to increase the Fund's holdings of convertible currencies (or, alternatively, of gold). These provisions require a member to use part of any increases in its reserves to repurchase the Fund's holdings of its currency, until the point is reached where these are reduced to 75 per cent of its

---

international transactions. A currency becomes convertible when the member has removed all restrictions on current payments and transfers and is subject to the obligations of Article VIII, Sections 2, 3, and 4 dealing with these restrictions, multiple currency practices, discriminatory currency arrangements, and the conversion of certain balances of its currency into gold or the currency of another member that holds the balance." (*International Financial Statistics*, June 1956, p. 7, fn. a.)

[6] The gold holdings of the Fund have also increased because service charges are paid in gold and because some members have used gold to make repurchases.

[7] Article VII, Sections 1 and 2. If the Fund finds that the currency of any member has become scarce, it may propose to that member to lend its currency to the Fund or, with the approval of the member, borrow such currency from some other source. Such action would make it possible for the Fund temporarily to increase its assets. The Fund has never done this, and is unlikely to do so except in connection with a deep and prolonged depression or, perhaps, major moves toward convertibility. Under the same Article, the Fund may require a member whose currency is scarce to sell its currency to the Fund for gold. This would not, however, increase the Fund's assets.

[8] According to John H. Williams, "these repurchase provisions are obviously among the most important in the new Agreement. Along with the scarce currency provisions . . . they represent the most significant work done on the Monetary Fund at Bretton Woods. Their purpose is to keep the Fund, so far as possible, on an even keel, assuring an effective balance between the supply of key currencies and the access of the member countries to this supply through their quotas." (*Postwar Monetary Plans and Other Essays*, New York, 1947, p. lxxi.)

quota.[9] As a rule, it is therefore difficult or even impossible for a member that purchases another member's currency not to reverse the transaction over a period of time, though the period may be very long. Even if that member did not offer to repurchase its currency voluntarily, and even if it had not made a specific repurchase undertaking at the time of its transaction, it would nevertheless be obliged to buy back its currency as and if its reserves increased.[10]

### Quotas and drawing rights

Quotas determine, or at least greatly affect, the amount and the rate of member drawings (borrowing) from the Fund. A member may draw from the Fund the currency it needs under prescribed terms and conditions, and it does this technically in the form of a purchase. A member buys a currency, e.g., U.S. dollars, and pays with its own currency, which may or may not be convertible. Such a transaction, technically called a drawing or a purchase, decreases the Fund's holdings of U.S. dollars and increases its holdings of other currencies. (The reverse operation, a member buying back its own currency with gold or convertible currency, is, as already mentioned, a repurchase.)

The drawing rights of members are related to their quotas. A member may not draw in any 12-month period an amount greater than 25 per cent of its quota, unless this condition is waived by the Fund. It is also expected that, on a cumulative basis, a member's drawings will not increase the Fund's holdings of its currency to more than 200 per cent of its quota. In the case of a member that originally had paid 25 per cent of its quota in gold and 75 per cent in currency, the 200 per cent provision would limit its total drawings to 125 per cent of its quota. These limitations are designed to assure the liquidity of the Fund and the equal access of all members to its resources, but they may have unintended effects if members' quotas are very small in relation to swings in their balances of payments.

At its discretion, the Fund may waive either or both of these conditions.[11] In several cases, it has already waived the limitation of 25 per

[9] Thus, if a member, on joining the Fund, paid the whole of its quota in its own currency and nothing in gold (and subsequently had no transactions with the Fund), it would over a period of time, if its reserves increased, be obliged to buy back 25 per cent of its original currency contribution with gold or convertible currencies.

[10] The Articles of Agreement contain (Article V, Section 7(c)) a number of safeguards, related to the size of quotas, limiting repurchase obligations. Repurchases are not to be carried to the point at which (a) the member's monetary reserves are below its quota; (b) the Fund's holdings of its currency are below 75 per cent of its quota, or (c) the Fund's holdings of any currency required to be used in the repurchase are above 75 per cent of the quota of the member concerned.

[11] Article V, Section 4.

cent of quota per year, but has not yet waived the maximum of 200 per cent of quota.

Consider the case of two Fund members whose economic positions and needs today are the same, but whose quotas are different. These two members might appropriately seek to draw from the Fund the same amounts in the same period of time. In fact, it is doubtful that either the process of drawing or its results would be the same in the two cases. The primary difference is that a stronger justification would probably be needed for a drawing that required a waiver than for one that did not. Furthermore, drawings within the so-called gold tranche[12] are practically automatic, in the sense that members "can count on receiving the overwhelming benefit of the doubt" with respect to them. The member with the larger quota will, of course, have the larger gold tranche, assuming that both paid the same proportion of their quotas in gold. Finally, the charges that a member must pay on a drawing outside the gold tranche increase progressively with the proportion of the quota drawn, as well as with the length of time the drawing is outstanding.[13] A drawing of any given amount will therefore carry heavier charges for a member with a smaller quota than for a member with a larger quota.[14] These considerations suggest why it is important that, as far as possible, quotas should have the same degree of adequacy for all members.

During and before the Bretton Woods Conference, countries often had conflicting views with respect to the size of quota they wanted. From the point of view of access to the Fund's resources, each country

[12] The gold tranche is generally the difference between a member's quota and the Fund's holdings of its currency. For a member that has had no transactions with the Fund and that originally paid 25 per cent of its quota in gold and 75 per cent in its own currency, the gold tranche is 25 per cent of its quota. In February 1952, in a general decision on use of its resources, the Fund stated that "each member can count on receiving the overwhelming benefit of any doubt respecting drawings which would raise the Fund's holdings of its currency to not more than its quota" (*Annual Report*, 1952, Appendix I, par. 3, p. 89). This policy was reaffirmed in *Annual Report*, 1955, pp. 84–85.

[13] The initial schedule of Fund charges has been changed twice, the first time as of December 1, 1951, and the second as of January 1, 1954. In addition to other modifications, the changes successively reduced the element of progression based upon the ratio of drawings to quotas. The changes in the charges for the period 2-2½ years will illustrate this. Initially, changes for this period ranged from 1.5 per cent to 3 per cent. In the 1951 revision, the range was 2.5 per cent to 4 per cent; and in the current schedule, it is 3 per cent to 4 per cent. Thus, the maximum charge for this time period is currently one third greater than the minimum; prior to 1951, it was 100 per cent greater.

[14] With a quota of 200 and a gold tranche of 50, a drawing of 50 would involve a one-time cost of ½ per cent of the drawing. The same drawing against a quota of 100 would involve the same one-time cost of ½ per cent plus charges, increasing with time, on the part of the drawing in excess of quota, i.e., 25. For a one-year drawing, the rate paid in the first case would be ½ per cent; in the second, 2 per cent.

wanted a large quota. From the point of view of paying its subscription, each country wanted a small quota. Furthermore, the larger the proportion of the subscription that was required to be paid in gold, the stronger was the inducement to request a small quota.[15]

### Quotas and voting rights

The quotas that determine the members' drawing rights and subscriptions also determine their relative voting strength, which is intended to reflect approximately their relative economic significance in the Fund. Each member has 250 votes plus one additional vote for each $100,000 of quota.[16] Thus, a member with a quota of $5 million has 300 votes, a member with a quota of $50 million, 750 votes. This formula is designed to give slightly greater proportionate weight to small countries than to large, but the net effect in this direction is small. The total number of votes in the Fund is currently 102,005, of which 14,500 votes, or 14 per cent, represent the effect of the basic uniform voting component. The United States has 27 per cent of the total number of votes, and the United Kingdom, 13 per cent. These two countries, plus China, France, and India, constitute the "big five" of the Fund, and together cast 56 per cent of the total votes. This weighted voting formula is important and cannot be neglected; on the other hand, its importance should not be exaggerated. A one-member one-vote rule would not necessarily eliminate the fact that some members may be more important than others. In practice, the Fund operates on the basis of consensus,[17]

[15] The question of the proportion of quotas to be paid in gold was controversial. The International Clearing Union conception visualized no gold payment. The original White scheme required uniform gold payments of 25 per cent (Preliminary Draft Outline for a Stabilization Fund, April 7, 1943, Section II, 4, *Proc. Bretton Woods*, Vol. II, p. 1537). A Federal Reserve variant of the Stabilization Fund proposal provided for a 50 per cent gold subscription (Roy F. Harrod, *The Life of John Maynard Keynes*, London and New York, 1951, p. 554). The U. S. revised draft of July 10, 1943, prepared after discussions of the April draft with some 30 countries, proposed gold payments ranging from 30 per cent to 50 per cent, depending upon how much gold a member had in relation to its quota; for countries that had been enemy-occupied, these requirements were to be reduced by one quarter (*Proc. Bretton Woods*, Vol. II, p. 1602). The Russians proposed a gold payment of 15 per cent, to be reduced by one half if a country had been occupied by the enemy (R. F. Mikesell, "Negotiating at Bretton Woods, 1944" in *Negotiating with the Russians*, Raymond F. Dennett, Editor, Boston, 1951, pp. 107–9).

[16] For voting on certain questions this arrangement is modified (Article XII, Section 5(b)). According to Article III, Section 2, a four-fifths majority is required for any change of quotas.

[17] The Fund's Rules and Regulations (C-10 and C-11) state that, "The Chairman will ordinarily ascertain the sense of the meeting in lieu of a formal vote. Any Executive Director may require a formal vote to be taken with votes cast as prescribed in Article XII, Section 3(i);" and that, "There shall be no formal voting in committees and subcommittees. The Chairman of the committee or subcommittee shall determine the sense of the meeting (including alternative points of view) which shall be reported."

though this naturally is not uninfluenced by the relative importance of its members.[18]

The Board of Governors is the highest organ of the Fund. So far, however, it has met only once a year, and most of its powers are delegated to a Board of Executive Directors, with a membership of 16, which is in continuous session. There are 58 members of the Fund, so that some Executive Directors represent more than one member. Quotas constitute the basis for determining the number of votes required for the election of Executive Directors, and the country or countries which they represent. Each of the members with the five largest quotas has the right to appoint an Executive Director. Each of the remaining 11 Directors is elected by a group of members, the group sometimes containing only one member.[19] Rules are set up from election to election stipulating the minimum number of votes that must be cast to elect a Director and the maximum number of votes that can be cast for any one Director. Country electoral combinations are arranged informally, before each election, to operate within these limits; and these combinations may change from one election to another. This procedure permits considerable flexibility in representational arrangements. The votes cast by the elected members of the Executive Board as constituted after the election of October 1954 ranged from 5.1 per cent of the total votes cast by one elected Director, representing ten Latin American countries, to 3.2 per cent cast by another Director representing Canada. Quotas thus determine which five members have their own appointed Directors, how members must combine in order to elect a Director, and whether any member other than the "big five" has sufficient votes to obtain its own elected Director. Taken individually, the voting strength of members with small quotas does not have much effect upon voting for Executive Directors. Here the question is the role of each member in an electoral combination. The size of the combination may have some importance but, for each member concerned, the relative size of a quota in its combination may be more significant than its relative size in the Fund.

Apart from voting and voting combinations, the quotas of members may be considered to constitute a structure or hierarchy that is not determined exclusively by economic considerations. For example, all international organizations have the problem of securing an "acceptable" international distribution of staff. No rigid personnel quotas are pre-

[18] The voting process and methods of voting in international organizations are examined in Wellington Koo, Jr., *Voting Procedures in International Political Organizations* (New York, 1947); the Fund's procedures are described on pp. 62–73. For a discussion of the general decision-making problem in international organizations, see Gunnar Myrdal, *Realities and Illusions in Regard to Inter-Governmental Organizations* (London, 1955).

[19] All the votes which an Executive Director is entitled to cast must be cast as a unit (Articles of Agreement, Article XII, Section 3(i)).

scribed for the Fund, but the Managing Director is required to "pay due regard to the importance of recruiting personnel on as wide a geographical basis as possible." It is not unreasonable that quotas are sometimes considered one of the more important criteria for judging whether the character of the Fund staff is sufficiently "international."

## Determination of Quotas at Bretton Woods

It was not necessary, of course, for quotas to have all the functions that in fact were ascribed to them; it was theoretically possible to determine subscriptions, drawing rights, and voting power on different bases. Nevertheless, it is questionable whether this would have simplified the process of determining quotas, since a number of different and sometimes conflicting purposes had in any event to be taken into account. This suggests that quotas could not have been determined rigidly by any one formula, or by exclusive attention to economic data.

The quotas of the original members were determined at Bretton Woods by a process of negotiation and compromise. These negotiations and compromises took place within the limitations imposed by a number of generally accepted principles.[20] It was assumed that the Fund would ultimately have assets of about $10 billion, but that the quotas of the Bretton Woods participants would amount to about $8 billion, thus leaving $2 billion for new members. Account also had to be taken of the relationship of the U.S. quota to the U.K. quota, and of the relationship of the quotas of other large countries to these two. It was clear that the United States had to supply a major part of the Fund's assets and that the major postwar demands would be for gold or dollars. Moreover, it was realized that countries that could pay the largest amounts of gold and convertible currencies to the Fund would not necessarily be those that would wish to make the largest use of its resources. Given this general framework, it would have been helpful to have a base line, more or less sharply defined, from which to start negotiation and discussion.

[20] The evolution of these principles is sketched in Roy F. Harrod, *op. cit.*, Ch. XIII, "Bretton Woods," and in E. M. Bernstein, "Monetary Stabilization: The United Nations Program," Ch. XIX in *Economic Reconstruction* (Seymour E. Harris, Editor, New York and London, 1946). It can be traced in the various proposals made by the United Kingdom, Canada, and the United States, which appear in *Proc. Bretton Woods*, Vol. II, pp. 1536–1636. There are interesting discussions in Johan W. Beyen, *Money in a Maelstrom* (New York, 1949), pp. 147–80; Henry Simons, *Economic Policy for a Free Society* (Chicago, 1948), esp. Ch. XII; R. F. Mikesell, *United States Economic Policy and International Relations* (New York, 1952), Ch. 9; J. H. Riddle, *British and American Plans for International Currency Stabilization* (National Bureau of Economic Research, Occasional Paper 16, December 1943); Louis Rasminsky, "International Credit and Currency Plans," *Foreign Affairs*, July 1944, pp. 589–603; and Ernest Francis Penrose, *Economic Planning for the Peace* (Princeton, 1953), Ch. 3.

This involved finding some method that was acceptable economically and politically of bridging the differences between the various objectives of quotas. This required a measure of agreement about the economic criteria that might be regarded as relevant and of the weight to be ascribed to them: the value of international trade; the composition and variability of this trade; the amount of international reserves; debtor and creditor positions; national income; relative importance of foreign trade; and the like. Draft proposals for the Articles of Agreement by Canadian[21] and U.S. experts in 1943 in fact assumed that this could be done. The U.S. proposal, which was the more rigid, read as follows:

> A quota for each member country shall be computed by an agreed upon formula which gives due weight to the important relevant factors, e.g., a country's holdings of gold and free foreign exchange, the magnitude and the fluctuations of its balance of international payments, its national income, etc.
>
> Before computing individual quotas on the basis of the agreed upon formula, there shall be reserved an amount equal to 10 per cent of aggregate quotas to be used as a special allotment for the equitable adjustment of quotas. Where the initial quota of a member country as computed by the formula is clearly inequitable, the quota may be increased from this special allotment.[22]

The provision for "an agreed upon formula" was later dropped. It does not appear either in the April 1944 Joint Statement by Experts on the Establishment of an International Monetary Fund[23] or in the Articles of Agreement drawn up at Bretton Woods in July 1944.

The elimination of any reference to, or requirements for, an economic formula did not eliminate the problem. On the contrary, it emphasized its complexity. For there were many economic criteria which pointed in different directions. In any case, the economic results also had political significance. If quotas were to be related to foreign trade alone, the United Kingdom would have a quota comparable to that of the United States; if they were to be related to gold holdings and national income, the U.S. quota would be much larger. Evidently attention had to be paid to a number of economic criteria in order to arrive at the desired political and economic result, namely, that the quota of the United States should be roughly twice that of the United Kingdom (or as it turned out, $2,750 million compared with $1,300 million), and that the total quotas of the Fund should be of the desired size.

Tentative quota calculations based on economic data, according to the so-called Bretton Woods formula, were made at Bretton Woods for many, but not for all, of the countries that took part in the Conference.

[21] Tentative Draft Proposals of Canadian Experts for an International Exchange Union (June 9, 1943), Section II(a) (*Proc. Bretton Woods*, Vol. II, p. 1583).

[22] Preliminary Draft Outline of a Proposal for an International Stabilization Fund of the United and Associated Nations (Revised July 10, 1943), Section II, 4 (*Proc. Bretton Woods*, Vol. II, pp. 1602–3). According to Section II, 2, aggregate quotas were to be "at least $5 billion."

[23] *Ibid.*, pp. 1629 ff.

This formula was generally, though informally, known at Bretton Woods. At no time has it had any official status and, as already noted, it is not mentioned in the Bretton Woods Agreement. The calculations that were made, and the data that were used, are nowhere officially recorded. It is known that, in the nature of the case, many of the formula calculations were made hurriedly, that they may have contained errors, and that of necessity some of the data were fragmentary or inaccurate. Nevertheless, calculations of greater or less authority and accuracy were made for many countries, and these were often used as a starting point for discussion. The practical difficulties of making formula calculations in some cases, e.g., the U.S.S.R., could hardly be overlooked, and a quota of $1.2 billion was agreed for the U.S.S.R. "almost entirely in recognition of its political and potential economic importance."[24]

The Bretton Woods formula has been published on at least four occasions. Professor Wilhelm Keilhau, Chairman of the Norwegian Delegation to the Bretton Woods Conference, included it in his official parliamentary report, and afterward in a book. In both places, four elements in the formula were reproduced, but the fifth was not shown. Professor Carlos Lleros Restrepo, Chairman of the Colombian Delegation to the Conference, discussed the formula in a series of lectures published in 1945. He also reproduced four elements in the formula. Restrepo did not include one of the elements mentioned by Keilhau, but gave the one which Keilhau omitted. Theodore A. Sumberg also reproduced the formula in 1946, in the same form as had been used by Keilhau, in an article in *Social Research*.[25] The complete formula was:

*Determine the sum of*

(1) 2 per cent of national income for 1940 (if this year was available and appropriate);

(2) 5 per cent of holdings of gold and U.S. dollars as of July 1, 1943 (if this date was available and appropriate);

[24] Mikesell states that, in order to meet Russian objections to the requirement for paying 25 per cent of the quota in gold, it was proposed at Bretton Woods "that its quota should be increased from the $900 million originally suggested to $1,200 million" (*Negotiating with the Russians*, *op. cit.*, pp. 107–9).

[25] The formula was given in the report of the Norwegian Bretton Woods Delegation to the Norwegian Parliament:

"The Joint Statement did not say anything about the method of determining the quotas. Article II, 1, specified briefly that the member countries must subscribe quotas to be agreed in gold and local funds. On the other hand, the size of the Fund was established at $8 billion, if all the United and Associated Nations subscribed; it was added that this was an amount corresponding to $10 billion 'for the world as a whole.'

"The tentative quota amounts which were mentioned during the preliminary negotiations in Washington in 1943 rested, however, on a definite formula: 'In order to take account of the above factors it is suggested that the quota of country be determined by the following formula:

(a) 2 per cent of the national income of 1939;

(3) 10 per cent of average annual imports, 1934–38;
(4) 10 per cent of maximum variation of annual exports, 1934–38.

*Increase this sum by*

(5) the percentage ratio of average annual exports, 1934–38, to national income.

---

(b) 5 per cent of the holdings of gold and gold-convertible exchange as of January 1, 1944;
(c) 10 per cent of average annual imports during the five-year period, January 1, 1934–December 31, 1938;
(d) 10 per cent of maximum variation in annual exports in the same five years.'

"At one of the meetings in the British Treasury at the beginning of June 1944 an American proposal for quotas for each individual country was read and later (June 4) sent to the delegates. Upon comparison with the formula which was later published, it has become evident that these figures were computed on the basis of the formula. Presumably the figures in the formula were established according to an approximate estimate which must have given a final total of about $8 billion, but according to the calculation no attempt was made to adjust the sum of the quotas determined by the formula to the total figure set for the whole Fund. The total of the proposed quotas amounted, specifically, to $8,490 million, or $490 million more than the fixed maximum." (Norway, Stortinget, *Om samtykke til at Norge tiltrer avtalene om det internasjonale valutafond m.v.* [Concerning Approval of Norway's Acceptance of the International Monetary Fund Agreements, etc.], Supplement 3, pp. 120–23.)

The same formula is given in Keilhau's book, *Den Nye Internasjonale Pengeordning* (*Bretton Woods*) (Oslo, 1946), pp. 69–70. The reference dates for the first two items each differed from those shown in the text.

The formula was described by Restrepo as follows:

"What is the formula for determining quotas? This determination was the subject of comprehensive discussion during the conference because it is impossible to work out a fixed formula, which by its mere application would automatically establish a figure for each country. The booklet *Questions and Answers on the International Monetary Fund*, quoted previously, has indicated that the following factors should be taken into account in determining quotas: the ability of a country to subscribe resources to the Fund, the need of this country for use of the Fund's resources, and the economic significance of the country concerned. In view of these considerations it has been recommended to apply, in a flexible way, the following formula: (1) 2% of the national income of 1939; (2) 5% of the holdings of gold and gold-convertible exchange as of January 1, 1944; (3) 10% of maximum variation in annual exports 1934–1938, inclusive. It has been further suggested that this total be increased by the percentage of the ratio between average annual exports from 1934 to 1938 and the national income. This method was taken into account, in a relative way, in determining the quota. It may be affirmed in the case of Colombia that its quota is fairly in conformity with the above formula, if we accept the figure of 700 million dollars as that of our national income, which, as is well known, has not yet been calculated scientifically." (Carlos Lleros Restrepo, *Fondo Monetario Internacional*, Banco de la República, Bogotá, 1945, p. 15.)

Sumberg's summary was as follows:

"Eschewing any single factor, the technical experts of the United States Treasury fixed the following quota basis in the Fund: '(a) 2 per cent of the national income of 1939; (b) 5 per cent of the holdings of gold and gold-convertible exchange as of January 1, 1944; (c) 10 per cent of average annual imports, 1934–1938, inclusive; and (d) 10 per cent of maximum variation in annual exports, 1934–1938, inclusive.' An adjustment of 10 per cent in each country's quota, so computed, was permitted so as to take into account political and other special factors." ("Financing International Institutions," *Social Research*, September 1946, p. 289.)

In any hypothetical quota calculated according to this formula, the greatest weight would certainly be given to national income. On the whole, it is likely that national income alone could account for some 40 to 50 per cent of quotas as they might be calculated for all members according to the formula. Furthermore, since the relationship of the other four formula elements to national income varies from country to country, the relationship of quotas to imports, which is of the greatest importance when quotas are considered as determining how much members may draw from the Fund, would also vary from country to country.

The economic significance for quota determination of each of the components of the formula taken by itself is not in every case self-evident. National income may be a good rough measure of wealth and productive capacity, but it presents great difficulties for comparative international measurement. It is much more difficult to determine the dollar value of national income for different countries, and the significance of these different levels, than it is to determine the dollar value of reserves or of international trade. Furthermore, national income by itself may not be a good measure of the ability of a country to contribute gold and foreign exchange resources to the Fund, since this ability is limited by the size of its gold and other international reserves in relation to its needs. Neither is national income an adequate indication of the extent to which a member may find it necessary to draw on the Fund in order to meet fluctuations in its exports and to correct temporary disequilibria in its balance of payments. For this latter purpose, international trade, in one or more of its aspects, would be a more reliable indicator.

It may be argued that, since the Fund was designed to help its members cope with balance of payments fluctuations, the variability of exports should have been given greater weight. It may also be argued that exports should have been expanded to take account of earnings from shipping, tourism, and other invisibles, and that trade in general should have been given greater weight. The importance assigned to holdings of gold and dollars tended to assign the largest quotas to the members least likely to draw upon the resources of the Fund.

It does not follow from these observations either that the Bretton Woods formula was a bad formula or that it would be easy to devise a better one. Given the threefold function of quotas and the relationship of the quota of the United States to that of the United Kingdom, the combination of the formula components has considerable economico-political significance. The complex and to some extent conflicting functions of quotas made it inevitable that any formula that might have been used should be complex. In any event, the formula calculations were intended to serve only as a starting point for further discussion,

and quotas themselves were set by a process of negotiation and compromise.[26]

[26] Several published accounts show the character and the difficulties of the negotiations. In a discussion of the size of quotas, Harrod says:

"The Russians, in particular, insisted on their right to a large one. The Chinese quota was somewhat inflated by American ideology, and the Indians complained bitterly that their own was derisory by comparison with it. The British exerted their influence on behalf of the Indians, whose quota was raised in consequence. Mr. F. M. Vinson—Vice-Chairman of the United States Delegation—was mobilized to deal with this question of quotas, which was indeed the thorniest of the Conference, and his handling of it, which was forceful, but at the same time tactful, helped to bring matters to a peaceful issue." (*Life of Keynes, op. cit.*, p. 579.)

Keilhau describes two meetings at Bretton Woods as follows:

"When the committee meeting ended at lunch time on Saturday, July 15, most of those present certainly had the impression that a distribution of quotas had been made which would not create too much opposition when being discussed in the first commission. The course the meeting took in the same commission the same afternoon came therefore as a complete surprise. One delegate after another stood up and, on behalf of his country, expressed unconditional dissatisfaction with the quota assigned. It appeared that the delegates who presented their views had all come to the conclusion that the largest possible quota would be the best possible one for their country. . . . In addition, it appeared that some countries felt that not enough attention had been paid to their prestige. China was dissatisfied with $550 million, France with $450 million, and India with $400 million. Each delegation quoted statistical figures which pointed most strongly toward increasing their country's quota, and they carefully withheld figures in the opposite direction. Some of the speakers even used completely absurd figures in their zeal. The head of the French delegation, Mr. Mendes-France, went farthest in his criticism. He said flatly that it was an insult to his country not to assign it a larger quota. . . . In all, fourteen delegations expressed their decided dissatisfaction in this way." (Report of the Norwegian Bretton Woods Delegation to the Norwegian Parliament, *op. cit.*, pp. 121–22.)

According to Professor R. Mossé, a member of the French delegation at Bretton Woods,

". . . most of the countries tried to obtain as large a quota as possible. The question of quotas dominated the Bretton Woods Conference, even though it was never taken up at committee meetings, but rather was discussed in private talks between ministers of finance and chiefs of delegations.

"The ground had previously been prepared by statistical studies and informal conversations. An attempt had been made to develop a pseudo-scientific formula which would take account of foreign trade, national income, monetary reserves, population, etc., and permit a mathematical determination of the quota of each country. However, if it was difficult to obtain comparable figures or even reasonable estimates, it was even more difficult to agree on a formula. Each country proposed a formula *a posteriori* devised to yield the result which the country wanted. The Chinese and the Indians would have liked a large weight for population. For the British, the figures on foreign trade were the only truly important ones. The Americans were more interested in national income. The French recommended a formula giving strong weight to population, including the population of overseas territories, and to gold holdings. With respect to the Soviets, it was generally admitted that any advantageous formula had to give weight to a coefficient K, representing their sacrifices and heroism. In the end, quotas were established more or less arbitrarily by the United States in a series of deals. Certain quotas (China and the U.S.S.R., for example) simply corresponded with the current military and political situation. In any event, while it must be admitted that the scale of quotas does not correspond in any precise way with the resources

## Quotas of New Members

Quotas for 44 countries were agreed at Bretton Woods, and are set forth in Schedule A of the Articles of Agreement; however, not all of the nations participating in the Conference are now members of the Fund. (Denmark was in attendance at the Conference, but its quota was left for later determination by the Fund.) The U.S.S.R., New Zealand, and Liberia have not joined the Fund; Poland and Czechoslovakia, which did join, are no longer members. On the other hand, as of April 30, 1956, 18 additional countries had joined the Fund. In each case, the Fund and the member have agreed upon a quota and upon the percentage of the quota that was to be paid in gold.

There is no published information on the method of determining the quotas of new members. It is clear, nevertheless, that each new quota must meet one primary consideration, i.e., it must fit into the existing structure of quotas. This may involve comparison with such other quotas as are considered "comparable." For example, a quota for a new member from Southeast Asia, or the Middle East, or Central America, would first of all have to fit comfortably into the structure of quotas of other members in the same area. This suggests that the criteria used for new members, and the methods of using these criteria, are likely to be generally similar to those used for original members. As far as economic criteria are concerned, this necessarily involves using data that, as time goes on, are further and further removed in the past, disregarding later developments. In some cases, this involves calculations for countries that had no independent national status in 1944 (e.g., Republic of Korea, Indonesia), or for countries whose pertinent statistics are incomplete or unsatisfactory. These difficulties may create serious methodological and/or statistical problems. All of these questions, however, are subordinate to the principle of comparability or "fit." It follows that, if the important quotas in any area are low, the quotas of new members from that area will also tend to be low.

The territory of some new members was in 1946 part of the territory of an original Fund member. Thus, the quota of $400 million agreed for India at Bretton Woods covered what is now India and Pakistan. When Pakistan became a member, a quota of $100 million was agreed, but the original Indian quota of $400 million was not reduced. Similarly,

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and the needs of the different countries, it nevertheless reflects in a general way the hierarchy of economic importance of the nations concerned." (*Le Système Monétaire de Bretton Woods et les Grands Problèmes de L'Après-Guerre*, Paris, 1948, pp. 47–48.)

"It seems safe to believe," according to Sumberg, "that a sense of reasonableness, tempered by the pressure of negotiations, was more important in finally determining relative quota sizes than devotion to mathematical formulae." ("Financing International Institutions," *Social Research*, (September 1946, p. 290).)

a quota of $275 million was originally allotted to the Netherlands, including Indonesia, but the Netherlands quota remained unchanged when Indonesia joined with a quota of $110 million. It may be noted that Article III, Section 2, of the Articles of Agreement provides that "no quota shall be changed without the consent of the member concerned"; in fact, no quota is now less than the figure originally agreed.[27]

## "Adequacy" of Quotas

The "adequacy" of the Fund's quotas cannot be judged except in relation to the functions that they are intended to perform. And as legitimate differences of opinion are possible about the relative importance of these functions, differences of opinion are equally possible about the adequacy either of the existing quotas, or of any others that might be substituted for them. To a member that looks foward to drawings from the Fund, the determination of adequacy is likely to be mainly a matter of estimating how far the possibility of drawing upon the Fund will ensure effective protection against balance of payments pressures. A quota that is "adequate" for this purpose will, of course, also entail the obligation to make certain contributions to the Fund, and the member will not be indifferent to the size of these payments. But this will, on the whole, be subordinate to the member's interest in the amount that the Fund will permit to be drawn. On the other hand, for a member that is unlikely to draw upon the Fund, adequacy in the sense related to drawing rights is a rather academic concept. Such a member is, in effect, asked to make a contribution to the common pool of exchange to be administered by the Fund. The question whether its contribution is adequate is likely to be answered, on the whole, by such a member by reference to considerations different from those that are most interesting to the authorities of a potential drawing country.

The adequacy of the Fund quotas, judged from the standpoint of their effectiveness in assuring to members an "opportunity to correct maladjustments in their balance of payments" by drawing upon the Fund's resources, has been questioned at various times and on various grounds. The initial asset size of the Fund, $8–10 billion, and the quotas implied by this size, were considered by some at the time of the foundation of the Fund to be too small to make a worthwhile job possible, particularly in contrast to the International Clearing Union, proposed by Lord Keynes, for which a credit-granting ability of $25 billion or more had been contemplated. Some, perhaps most, of this criticism was

[27] The quota for Honduras was reduced at its request in 1948, but restored to the original amount in 1951. This is the only instance of the reduction of a quota, and this reduction turned out to be temporary.

the result of divergent conceptions of what the Fund's role should be, and of the amount of resources that the United States could, or should, provide. Nevertheless, the view was also held by some critics that even for the purposes that were in fact embodied in the Articles of Agreement quotas were inadequate.[28] And subsequently, irrespective of the position that might have been taken in 1944, it was strongly represented that the large increase in prices during the war, and the postwar increases in prices and the volume of international trade, could have no other effect than to make Fund quotas increasingly less adequate.[29] The total resources of the Fund, it was argued, and especially its gold and U.S. dollar resources, were too small, and the policies governing members' access to these resources, related as they are to quotas, were also unduly restrictive. These questions will be considered only briefly here, since an exhaustive treatment is far beyond the scope of this paper, and the concept of adequacy of monetary reserves itself raises a number of serious problems.[30]

The value of international trade in 1951 was three times, and in 1955 three and one-half times, its value in 1939. The volume of international

[28] Most of the comments on the adequacy of the Fund's resources are related to conceptions of what the Fund was expected to do, partly in contrast to the International Credit Union. Among a number of specific comments on the relation of the Fund's resources to the functions actually assigned to it, R. F. Mikesell quotes the view that "the Fund promises too much, since its resources are too small for the realization of its objectives." ("The International Monetary Fund," *Journal of Political Economy*, Vol. 57, 1949, p. 395, fn. 2.) It was also argued by some that the Fund was too large for its purposes. On this question Viner in 1944 stated that: "The maximum lending power of the Fund in U. S. dollars and gold will not much exceed $3 billion, and $5 billion would appear to be the theoretical maximum figure, altogether unlikely to be reached, for aggregate net indebtedness of all countries debtor to the Fund. The burden of proof is on those who, professing sympathy with the objectives of the Fund, nevertheless hold that these are excessive figures." He also noted, however, that after the postwar transition period, it might well turn out that the Fund would be larger than it needed to be. (Jacob Viner, *International Economics*, Glencoe, Illinois, 1951, p. 240.)

[29] Two groups of UN experts have expressed the view that the resources of the Fund are inadequate; see *National and International Measures for Full Employment* (Lake Success, 1949) and *Measures for International Economic Stability* (New York, 1951). The former report states that "It is very doubtful that, even if the present fundamental disequilibrium in international transactions were removed, it [the Fund] would be capable of dealing with the problems that are likely to arise in the event of any sizeable fluctuations in the currency disbursements of the leading industrial countries" (p. 61). The latter report argued that the Fund "provides a comparatively trivial supplement to national reserves, assuming no waiver of the rule limiting members' annual purchases of foreign currencies to 25 per cent of their quota"; and it considered that effective action by the Fund required an increase in its resources (pars. 114–16). It expressed the opinion that the Fund "will be unable to cope with more than minor fluctuations unless its resources are substantially enlarged" (par. 140). "At the time of the Bretton Woods Conference in 1944, there was some doubt about the adequacy of the Fund's resources. But even if they were just adequate then, they cannot be adequate now" (par. 142).

[30] "The Adequacy of Monetary Reserves," *Staff Papers*, Vol. III, No. 2 (October 1953), pp. 181–227.

trade also has increased, and the prices of goods traded have increased even more. These do not appear to be transient developments. On the contrary, it appears prudent to regard them as the basis for further expansion of trade. As a result of these changes, quotas constitute a much smaller percentage of current trade[31] than they did of prewar trade. While, as shown by Table 1, only 7 members have quotas less than 15 per cent of their 1937–38 trade, 49 members have quotas less than 15 per cent of their 1951–53 trade.

TABLE 1. FUND MEMBERS GROUPED BY PERCENTAGES OF QUOTAS TO TRADE, 1937–38 AND 1951–53

| Per Cent of Quotas to Trade | Number of Countries | |
|---|---|---|
| | 1937–38 | 1951–53 |
| Less than 5 | 1 | 14 |
| 5– 9.9 | 1 | 23 |
| 10–14.9 | 5 | 12 |
| 15–19.9 | 5 | 3 |
| 20–29.9 | 13 | 3 |
| 30–39.9 | 16 | — |
| 40 and over | 12 | — |
| Total[1] | 53 | 55 |

[1] The Fund now has 58 members. Not all of these are included in this total, or in Table 2, either because they did not exist as independent nations before the war, or because the data were not easily available or presented other difficulties.

TABLE 2. QUOTAS OF FUND MEMBERS COMPARED WITH THEIR AVERAGE 1951–53 TRADE

| Size of Quota (*million U.S. dollars*) | Quotas as Per Cent of Trade | | | | | |
|---|---|---|---|---|---|---|
| | Total | 1–4.9% | 5–9.9% | 10–14.9% | 15–19.9% | 20% and over |
| Up to 10 | 16 | 9 | 4 | 3 | — | — |
| 10– 24 | 9 | 5 | 4 | — | — | — |
| 25– 49 | 5 | — | 3 | 1 | 1 | — |
| 50–124 | 13 | — | 6 | 5 | 1 | 1 |
| 125–249 | 4 | — | 3 | 1 | — | — |
| 250 and over | 8 | — | 3 | 2 | 1 | 2 |
| Total[1] | 55 | 14 | 23 | 12 | 3 | 3 |

[1] See Table 1, footnote.

Moreover, generally speaking, the smaller quotas are less in proportion to the 1951–53 value of trade than are the larger ones. Fourteen quotas are less than 5 per cent of the member's 1951–53 trade, i.e., less than the value of two and one-half weeks' trade. None of these quotas is greater than $25 million, and 9 are less than $10 million (Table 2).

[31] In the analysis which follows, trade is measured as the average of exports and imports.

The possibility of a change in the variability of trade must also be taken into account in estimating the effects of the expanding value of world trade upon the adequacy of quotas. It is, of course, impossible to know whether, in the future, international trade will be more or less variable than it was before the war. To a large extent, this depends upon the degree of success attained by the United States and the other important industrial countries in ensuring that economic activity expands fairly steadily and without large fluctuations. (Variations in trade will also depend to some extent on the supply of U.S. dollars made available through aid, military programs, and the like.) The variability of trade since the war has been relatively small, and recessions have been short-lived. The trade of many countries since 1946 has shown a sharp upward trend year by year, and this of itself has tended to damp down or mask variability. There is some reason to believe that the coefficient of variability (value of fluctuations related to the value of trade) has been lower since 1946 than before the war. Nevertheless, at present levels of trade or (considering the next few years) even higher levels, the resources of the Fund and the members' quotas might be insufficient to deal with a recession of the order of 1937–38, and the position would be still worse in the event of a depression approaching the magnitude of 1929–32. On the other hand, it may well be that the increased emphasis—for which, indeed, there is a political necessity—in all countries, and particularly in the major industrial ones, on the maintenance of high levels of employment and income will significantly reduce trade fluctuations. Trade in the future may well be more stable than it was before the war, though this would not rule out the possibility that there may still be wide variations in the trade of some individual countries.

Practically speaking, the asset size of the Fund should also be measured in terms of the currencies which member countries may wish to draw. Up to the end of 1955, members have very largely drawn dollars in preference to other currencies, and the Fund holds about $3.7 billion of gold and dollars. In the future, when sterling and other major European currencies have become convertible, a larger part of the Fund's assets should be in demand. As more currencies become convertible, there should be an increase in the proportion of drawings in non-dollar currencies. The Fund holds more than $2 billion of sterling, francs, deutsche mark, and other major European currencies. Convertibility of these major currencies would substantially increase the assets upon which Fund members might wish to draw. The book value of the Fund's assets would be unchanged, but there would be a more adequate supply of the currencies that members were likely to wish to purchase.

The adequacy of the Fund's assets may also be considered from the point of view of the use already made of them. The maximum drawings

in a twelve-month period have been $606 million in the fiscal year ended April 30, 1948; of this, $600 million was drawn in dollars. Drawings in 1954 totaled $62.5 million, and in 1955, $27.5 million. Total drawings up to April 30, 1956 amounted to $1,236 million. The maintenance of annual drawings in dollars at the maximum rate so far achieved ($600 million) would, if each drawing was repaid at the end of three years, require less than one half of the Fund's holdings of gold and dollars.

In 1952, the U.S. National Advisory Council reported that "it believes that the Fund's dollar resources are adequate for present needs, or requirements in the near future, so that it does not recommend a change in the United States subscription at this time."[32] Two years later the Council reported that "From time to time there have been discussions of the adequacy of the Fund's resources to fulfill the purposes for which the Fund was created. The question has been raised in various ways in reports to and discussions of the Economic and Social Council of the United Nations. The principal issues have been the availability of the Fund's resources to deal with the international impact of possible recessions in major countries, and the adequacy of the Fund's holdings to deal with the effect of programs of restored currency convertibility. The Fund has stated on many occasions that one of its functions would be to deal with the balance of payments problems of its members arising from cyclical fluctuations, and this position is in accord with the interpretation of the Articles requested by the United States Governor in 1946 in accordance with the requirements of the Bretton Woods Agreements Act. It is recognized that it is difficult in advance to determine the likely effect of a recession on the balance of payments of the Fund's members. While it is the view of the Council that anticyclical action must consist primarily of internal measures, it believes that the Fund would have an important supplementary function in reducing the international impact of economic fluctuations. The Council, however, does not believe that it is feasible or desirable to make any advance commitment of special action by the United States Government with relation to the Fund's countercyclical functions. . . . It is also recognized that the adoption of convertibility programs by various countries might require the additional support of Fund drawings to supplement their monetary reserves. . . . The Council believes that the Fund's resources could be used effectively in assisting convertibility programs, but it does not believe that it is necessary to increase the Fund's dollar resources by an increased United States subscription."[33]

In 1952, at a meeting of the Economic and Social Council, the representatives of the United Kingdom, of Canada, and of France also stated

[32] Third Special Report, June 1952, p. 18.
[33] Fourth Special Report and Semiannual Report, March 31, 1954, p. 23.

that their Governments did not favor an increase in the Fund's resources at that time. The U.K. representative stated that in times of recession the Fund should certainly exercise its power to raise the percentage restriction on annual borrowing and even, in certain cases, waive the rule that its holdings of a country's currency should not exceed 200 per cent of the country's quota. "Yet, on balance," he concluded, "it would be premature to arrange for an increase in the Fund's resources when there were still $3,000 million in gold and dollars available for use.... The Fund should rather be encouraged to continue its policy of more generous lending in return for firmer assurances of repayment, and should throw in its resources for what they are worth when they are most useful, namely at the outset of the recession, and trust in the common sense of governments to replenish these resources if they should become exhausted in a good cause."[34]

A discussion of the adequacy of Fund quotas, and of the desirability of increasing them, raises, indeed, a number of conflicting considerations: (1) For many members, drawings limited to 25 per cent of quota per year are not large enough to be regarded by them as, in any effective sense, a secondary reserve; on the other hand, the Fund has used an increasingly flexible policy in the past few years and made significant use of the waiver procedure.[35] (2) Members have made small use of the Fund's resources up to the present time. (3) The largest members of the Fund, the United States and the United Kingdom, have stated that they do not believe that substantial additional amounts of gold, dollars, and sterling should at the present time be paid to the Fund to help meet a deep depression which may never occur. (4) The liquidity of the Fund might be affected adversely if the larger quotas were not changed, but most other quotas were increased substantially. (5) The assets of the Fund may prove inadequate in the event of a substantial world-wide depression.[36]

[34] Economic and Social Council, Fourteenth Session, 627th Meeting, July 1, 1952, p. 450.

[35] The Fund approved its first waivers in the fiscal year 1954 and commented on them as follows: "The use of the waiver indicates the increased flexibility with which the Fund now feels that it can carry on its operations, and shows that the Fund is an instrument that may be used effectively for helping its members to deal with their extraordinary problems, whether individual or general" (*Annual Report*, 1954, p. 105). The next year the Fund stated that it "would continue to consider the further appropriate development of its practices so that, without neglecting the importance of maintaining proper standards, its operations may be made more helpful to members. In its practices, the Fund has recognized that it is appropriate, where necessary to carry out any of the policies outlined above, to grant a waiver under Article V, Section 4, to permit countries to draw more than the 25 per cent of quota normally permitted during a 12-month period" (*Annual Report*, 1955, pp. 85–86).

[36] The UN report on *Measures for International Economic Stability* noted in 1951 that "It may seem strange to advocate an increase in the resources of an

## Procedure for Changing Quotas

It would be interesting to speculate how quota adjustment might have worked if a proposal[37] made in 1943 had been adopted; it contemplated that the Articles of Agreement should require quotas to "be computed by an agreed upon formula" and to "be adjusted on the basis of the most recent data three years after the establishment of the Fund and at intervals of five years thereafter, in accordance with the agreed upon formula." This proposal was not, in fact, pressed. Instead the Articles of Agreement provided that

> The Fund shall at intervals of five years review, and if it deems it appropriate propose an adjustment of, the quotas of the members. It may also, if it thinks fit, consider at any other time the adjustment of any particular quota at the request of the member concerned. A four-fifths majority of the total voting power shall be required for any change in quotas and no quota shall be changed without the consent of the member concerned.[38]

No criteria were provided for the adjustment of quotas. This is consistent with the fact that there is also no explanation in the Articles of Agreement of either how quotas were established at Bretton Woods, or how quotas are to be established for new members.

In all, there have been six changes of members' quotas since 1946. Two of these involved Honduras: the first change reduced its quota

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institution which has used only a fraction of its resources in its first four and one-half years of operation. But these years have been exceptional . . . if our analysis is correct, there may well arise in the future urgent, general and perfectly proper demands for access to the Fund. If it is to perform its functions fully in these circumstances, the Fund may well need substantially larger resources than it now possesses" (par. 143).

In 1952 the Fund commented on the general question of members' quotas and total resources as follows: "A UN group of experts has recommended an enlargement of the Fund's resources so as to increase the effectiveness of its activities in such circumstances. The Fund has for some time had under consideration the question of increasing its members' quotas, having in mind such factors as the magnitude of possible balance of payments deficits in a depression and the fall in the purchasing power of money since 1946. It has, however, concluded that an increase in its resources is not a question for action at the present time. Its existing resources are by no means small as a source to finance cyclical balance of payments deficits. The Fund's resources, moreover, are secondary reserves and the ability of countries to maintain import demand in a depression will depend also on the size of their reserves. It is important, therefore, that countries follow financial policies that will enable them to build up reserves in periods of prosperity which would provide a first cushion to absorb the shock of a recession." (*Annual Report*, 1952, p. 46.)

[37] Draft Outline of a Proposal for an International Stabilization Fund, circulated by the United States (Revised July 10, 1943), Section II, 5 and 7. *Proc. Bretton Woods*, Vol. II, pp. 1597 ff., Section II, 6, provided that the formula itself could be changed only by a four-fifths vote. While guaranteeing that a member's quota would not be increased without its consent, the proposal made no provision for denying an increase to a member prepared to accept the increase calculated in accordance with the formula.

[38] Article III, Section 2.

from that set forth in Schedule A of the Bretton Woods Agreement; the second restored it to its original value. Egypt, Iran, Paraguay, and France had protested at Bretton Woods that the quotas they accepted there were too low. After the Fund began operations, these members requested increases in their quotas, and these requests were granted.

The Fund has made two quinquennial reviews of quotas under Article III, Section 2. The first was completed in 1951, at the time of the hostilities in Korea, and the second, in 1956. Both reviews involved extended consideration, but neither resulted in adjustment of "the quotas of the members." The decision in 1951 was reported as follows: "After consideration of the matter, the Executive Directors decided that, under the current international circumstances, it was difficult to reach a conclusion on the question at that time and therefore looked forward to discussing the question further at as early a date as might be practicable."[39] The question was not formally reopened, and no quotas were increased or adjusted during, or after the close of, this first review.

In 1955, a number of members expressed the view that quotas were inadequate, and during the Tenth (1955) Annual Meeting of the Board of Governors of the Fund, several Governors made statements to that effect, the Governor for Pakistan, for example, suggesting that some members with temporary balance of payments difficulties might have refrained from approaching the Fund because their quotas were "so small in relation to 'swings' in their trade as to render even the maximum facilities from the Fund to appear inadequate."[40] After the completion in January 1956 of the second quinquennial review, the Fund did not propose any general revision of quotas.

[39] *Annual Report*, 1951, p. 88.
[40] *Summary Proceedings of Tenth Annual Meeting*, 1955, pp. 46 and 66.

# Strategic Factors in Balance of Payments Adjustment

E. M. Bernstein*

IN THE PAST TEN YEARS, the staff of the International Monetary Fund has had an unusual opportunity to study the balance of payments problems of many countries. The studies that have been made show enormous diversity in the nature and the causes of balance of payments problems. Inevitably, they have called for reconsideration of the means by which balance of payments difficulties can be met. In the course of such reconsideration, some neglected ideas have come to the fore and some accepted ideas have been modified. Above all, it has become clear that payments problems can be best studied as part of the disorder that emerges in an unstable and unbalanced economy.

## Defining a balance of payments problem

A proper balance of payments is one that enables a country, over an average of good years and bad, to meet its payments (including ordinary capital outflow) out of its receipts from current transactions and ordinary capital inflow, without compelling it to keep economic activity below a desirable level or to restrict imports merely for the purpose of avoiding a deficit in its balance of payments.[1] This definition could be further refined to provide that a proper balance of payments should enable a country to add to its monetary reserves a proportionate share of the newly mined gold going into the world stock of monetary gold or its equivalent in foreign exchange. A country whose balance of payments is not a proper one by this test has a balance of payments problem. For convenience, this discussion is framed in terms of countries whose payments difficulties take the form of a persistent deficit, large enough to require remedial action.

There are certain payments difficulties which are not considered in

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[1] The emphasis is placed on *ordinary* capital movements as relevant to the longer-run concept of a proper balance of payments and in order to exclude capital flight, which may be caused by political factors, and extraordinary capital inflows, which may be for the purpose of meeting balance of payments difficulties.

this paper. For example, a country suffering a temporary deterioration in its payments position because of a fall in export prices is not regarded as having a balance of payments problem. Nor is a country suffering from a temporary failure of a major crop, which may make its exports abnormally small or its imports abnormally large, regarded as having a balance of payments problem. If countries cannot maintain the flow of imports for which they have a demand under temporarily adverse conditions, their real problem is one of reserves rather than the balance of payments.

This definition also excludes widespread payments difficulties incident to a deep and prolonged depression in a great trading country. Such a depression would, in fact, cause a very serious payments problem in a large number of countries. It is, however, a problem *sui generis*, better considered in relation to the concept of a scarce currency, rather than as one of the several types of balance of payments problem that have their origin in conditions affecting one or a few countries.

## Types of Balance of Payments Problem

The social and political forces that induce countries to follow economic policies that cause balance of payments difficulties vary from country to country and from time to time. The economic causes, however, are surprisingly similar and provide a satisfactory basis for the classification of balance of payments problems. These causes are current inflation, manifested by excessive spending; price and cost disparity reflecting an inflated level of home prices and costs; and structural changes resulting in a deterioration in the real international economic position of a country. The actual balance of payments problem of an individual country cannot, as a rule, be attributed exclusively to any one of these causes. In most countries, there is a complex balance of payments problem to which each of the main causes may contribute in varying degree.

### Current inflation

The view that inflation causes balance of payments difficulties goes far back, at least to Adam Smith. In the *Wealth of Nations*, he laid down the rule that "the whole paper money of every kind which can easily circulate in any country never can exceed the value of the gold and silver, of which it supplies the place, or which (the commerce being supposed the same) would circulate there, if there was no paper money."[2] He then

[2] Adam Smith, *An Inquiry into the Nature and Causes of the Wealth of Nations* (edited by Edwin Cannan, London), Book II, Chap. II, p. 283.

observed that, if too great a quantity of paper money were issued, the excess notes would be presented for exchange into gold and silver to be sent abroad; and the gold and silver can flow abroad only if there is a balance of payments deficit. The implication is that the balance of payments deficit will equal the excessive outlay and, presumably, that the deficit will emerge rather quickly.

If a country has a proper balance of payments, an excessive expansion of credit must result in a balance of payments deficit.[3] To the extent that the increased spending caused by excessive credit is directed toward import (or export) goods, the balance of payments will be immediately affected. Even that part of the increased spending that is directed toward home goods (other than exports) will in time affect the balance of payments, for the increased expenditure will tend to raise prices, and at higher domestic prices, a larger proportion of aggregate expenditure may be directed to import (or export) goods. The difficult question is not whether inflation will affect the balance of payments, but by how much and how soon.

In a large country like the United States, the aggregate balance of payments deficit may fall considerably short of the excessive credit. In time, a new equilibrium would be established at the point where the increased import demand generated by the rise in incomes and prices in the United States is equal to the increased demand for exports generated by the rise in incomes and prices outside the United States. Because the United States represents a very large part of the world monetary economy, perhaps 40 per cent of the excessive credit would finance U.S. production and U.S. trade at the higher level of prices. The remainder would have the effect of increasing the money supply of other countries, through balance of payments surpluses, and the increase in their money supply would be used to finance their production and trade at a correspondingly higher level of prices.

The effect of an excessive expansion of credit in generating a balance of payments deficit would be much greater in any other country. In a country like the Philippines, for example, which constitutes a very small part of the world monetary economy, practically all of the excessive credit would manifest itself as a balance of payments deficit. For the Philippines, it can be said with approximate accuracy that an inflation

[3] The analysis is based on the assumption that all countries have fixed exchange rates and that there is full employment. It also assumes that prices rise in precise proportion to the excessive increase in the quantity of money. These simplifying assumptions are almost always applicable to underdeveloped countries. Even in the great industrial countries, where the behavior of the monetary system is more complex, the effects of excessive credit will approximate those set forth in the analysis above. This brief statement is in part based on studies in progress by J. J. Polak and Marcus Fleming of the Fund staff.

of 100 million pesos will result in a balance of payments deficit equivalent to US$50 million.

There will also be vast differences between countries in the rate at which the aggregate payments deficit attributable to excessive credit expansion is reached. In the United States, where the marginal propensity to import is low, the primary effect on imports will be small. Most of the additional expenditure will affect home prices. If the elasticity of substitution of import goods for home goods is moderate (although greater than unity), the secondary effects on imports will also be moderate. In short, it may be some time before the aggregate balance of payments deficit that may ultimately be expected from an excessive expansion of credit is reached. On the other hand, in countries where the marginal propensity to import and the substitutability of import goods for home goods are relatively high, the aggregate balance of payments deficit that may be expected will manifest itself rather quickly. All this assumes, of course, that the impact of the inflation is not diverted from the balance of payments and, through restrictions on trade and payments, concentrated more exclusively on the domestic sector.

### Price and cost disparity

Excessive credit may conceivably act on the balance of payments very largely through increased expenditure; that is to say, the inflation may have little effect on domestic prices and almost no effect on domestic costs. This happens in a business cycle, in which excessive expenditure during the boom gives rise to a balance of payments deficit but does not upset the structure of costs. With a very mild inflation, the experience may be similar in countries in which wage rates do not respond quickly to the demand for labor and the cost of living. A large and persistent inflation, however, is almost certain to bring about a substantial rise in prices; and sooner or later, such a rise in prices will bring demands for wage increases.

When costs have risen significantly, exporters will find their competitive positions impaired. Even exporters of industrial specialities may find that higher prices result in a considerable reduction in their sales abroad. Where exports are available from many sources and are sold in many markets, price competition may limit even more severely the amount of sales abroad. Exporters of standardized agricultural products will also find that higher costs affect exports. The prices of such products are much the same the world over. It is impossible to secure higher prices merely because a country's costs have risen. With a rise in costs relative to prices, producers of standardized export crops find it difficult to maintain production on the customary scale.

There is another aspect of price disparity that may intensify balance

of payments difficulties. Persistent inflation makes governments sensitive to complaints about the rising cost of living. To avoid wage demands, industrial countries may subsidize food imports. Prices of imports may already be low relative to domestic prices generally; subsidies on food imports will have the effect of further encouraging the demand for imports. A similar policy has been followed in some agricultural producing countries, with even more harmful effects on the balance of payments. Food prices are kept down by price control and by placing food imports in a favored exchange category. As a consequence, food prices are far below the level that a free price and unified exchange system would determine and domestic production is discouraged. Countries that should provide all or nearly all of their food requirements are induced to become large importers of basic foods.

The significance of price and cost disparity arises from the competition of exports with the products of other countries and the competition of imports with domestic products. Price and cost disparity may not be revealed by other price comparisons, particularly purchasing power parity comparisons. Because the United Kingdom's export prices have risen substantially less than its import prices, the argument has been made that its competitive position must be very favorable. This is clearly a case of comparing the wrong price series. The United Kingdom's export prices have risen substantially less than its import prices because of the great increase in world demand for raw materials. The United Kingdom does not compete with such goods to any significant extent, either in its home markets or abroad. The most relevant comparison for determining price and cost disparity is between the prices of U.K. export goods and the prices of the industrial goods of North America and Western Europe.

Purchasing power parity could reflect a country's competitive position in world trade only under circumstances which cannot be found except after an inflation in which all prices and costs rise to much the same extent and the structure of the economy has not been significantly affected by the inflation. Clearly, the purchasing power parity doctrine —that relative changes in the over-all indices of prices in two countries indicate the size of the change that is appropriate in the foreign exchange rates for their currencies—is not applicable after the enormous economic changes induced by a great war. Price and cost disparity is sometimes a major factor in the balance of payments problems of some countries. It must be interpreted, however, in a more realistic manner than through purchasing power parity comparisons.

### Structural changes

In a dynamic world, innumerable forces are constantly at work to change a country's needs for foreign exchange and its capacity to earn

foreign exchange. Insofar as these forces do not arise from current inflation or from price-cost disparity, they reflect structural changes. While changes in the real international economic position of a country are generally related to the supply and demand schedules of their exports and imports, they may also arise in other ways. Thus, the real position of some European countries was adversely affected by the need for liquidating investments and incurring overseas debt to carry on World War II or to hasten reconstruction. On the other hand, the great expansion in the overseas expenditures of the U.S. Government, much of which will probably continue for an extended time, has improved the real international economic position of many countries.

The structural changes which are most important in this context involve the supply and demand schedules for exports and imports. Because the United Kingdom and Western European countries generally have greater difficulty in attracting labor to coal mining, so that costs have risen and output has fallen, their real payments positions have deteriorated. Coal exports from Europe, once of great significance, have declined almost to the vanishing point, and sizable imports have taken their place. The development of synthetic rubber and various synthetic fibers has adversely affected the payments positions of a number of countries. With the great expansion in world production and trade, the impact of such changes has not always seemed as great as it really has been. At the same time, in many underdeveloped countries emphasis has been given to industrial development. This shift has, of course, adversely affected the export positions of some countries formerly supplying certain manufactured goods to these markets.

Changes in the terms of trade may reflect the greater difficulty of expanding supply to match the growing demand for particular goods. Such changes clearly affect the real international economic position of importing and exporting countries. It is not quite clear, however, whether a rise in the prices of raw materials relative to manufactured goods which is a result of a higher general level of production and trade should be so regarded. The terms of trade of the 1930's, adverse to raw material exporting countries, were in part the consequence of the general depression in the great industrial countries. The terms of trade of the 1950's, favorable to raw material exporting countries, were in part the consequence of the general expansion in the great industrial countries. Insofar as the terms of trade respond to the level of business activity, they are better regarded as independent of changes in the real international economic positions of exporting and importing countries, although they are not, of course, without effect on the balance of payments.

Changes in the real international economic positions of different countries are part of the dynamics of a progressive world economy.

Ordinarily, such changes take place slowly, so that there is ample opportunity to make minor adjustments which will enable countries to keep their payments in order. Sudden changes, however, may have more disturbing effects on the payments position of a single country. The introduction of synthetic fertilizers obviously had a seriously adverse effect on Chile. The opening of new oilfields is having a very favorable effect on the payments of certain countries. These are rare cases. Except for the cumulative effects during and after a great war, structural changes by themselves are not of major significance as causes of balance of payments difficulties.

## Remedies for Balance of Payments Problems

There is a real cost in supporting an untenable payments position. If a deficit is allowed to emerge, and reserves are sold at an inappropriate exchange rate, the economy is providing resources for private use at less than their real value. This is not merely a transfer of wealth, for the reserves will be used by individuals to acquire goods for consumption and investment which are not worth to them their real cost to the country. Even if a balance of payments deficit is not allowed to emerge, the support of an inappropriate exchange rate through restrictions will result in serious economic distortions. Decisions concerning which goods to produce and which home goods to consume and invest will be made on the basis of a price system (including the exchange rate) that is not functioning properly.

### Determining the Causes of the Payments Problem

It is difficult in any given situation to determine whether a balance of payments problem is caused by inflated demand, by price-cost disparity, or by certain real factors. In fact, since a balance of payments deficit may have several causes, it is essential to analyze the problem in terms of the economy as a whole. Assume, for example, that a country has a large balance of payments deficit while maintaining full employment. Under such circumstances, it would be reasonable to conclude that one cause of the balance of payments deficit is excessive aggregate demand. It may be noted in passing that a country would not ordinarily be willing to absorb the employment effects of a very large balance of payments deficit except under conditions of inflation.

Such a tentative conclusion would have to be supported by an analysis of various sectors of the economy. It would be desirable, for example, to see whether bank credit is expanding at a rapid rate and whether

prices are rising. It would be necessary to determine whether investment is unusually large for the level of income and savings that might be expected in such a country. Finally, it would be important to see whether there are shortages of labor and materials. If the economy shows obvious signs of a current inflation, there can be no reason for doubting that *one* cause of the balance of payments problem is excessive aggregate demand.

It may not always be obvious that the country is in the midst of inflation. The dramatic symptoms of inflation in the form of credit expansion and rising prices may be absent, even though aggregate demand is excessive. Large cash balances accumulated in the past may be used to finance abnormal consumption and investment. Prices may be kept down by controls. This is the kind of inflation that prevailed in many countries in the early postwar years. Nevertheless, with full employment the existence of a balance of payments deficit is a clear indication of current inflation. When a country absorbs in consumption and investment more than its own output and any ordinary capital inflow, without offsetting unemployment, aggregate demand must be excessive to the extent of the balance of payments deficit.

Even if a country has some unemployment while it has a balance of payments deficit, aggregate demand may still be excessive, as the balance of payments deficit may be large relative to the number of unemployed. On the other hand, if there is considerable unemployment as well as a balance of payments deficit, the payments problem must have some other cause. This other cause may be price-cost disparity or a deterioration in the real international economic position of the country.

A study of exports and imports will throw further light on the nature and the cause of the balance of payments deficit. If imports are more and exports less than would ordinarily be expected, and this is true of the whole range of exports and imports, there is prima facie reason for believing that *one* cause of the balance of payments deficit is price-cost disparity. This analysis could be further supported by a comparative study of changes in prices and wages at home and abroad.

On the other hand, if imports are at approximately the level that would ordinarily be expected, but exports are below their usual level, the cause of the problem may be a structural change in the competitive positions of certain export industries. This would be so if the deficiency in exports is concentrated in one or several fields. Similarly, if exports are approximately what would ordinarily be expected, but imports of one or a few products are above their usual level, the cause may be a structural change in the demand for certain import goods. The great increase in oil imports in a number of countries is a change of this type.

It should be noted that considerable unemployment even without a

persistent payments deficit may indicate the existence of a balance of payments problem. If unemployment is caused by holding down aggregate demand because of fear of causing a balance of payments deficit, the remedies for the employment situation will have to include the same measures that would be taken to correct a balance of payments disequilibrium caused by price-cost disparity or structural changes that have brought about a deterioration in the real international economic position.

### Treating the causes

The remedies for balance of payments difficulties should be selected in the light of their causes. If the cause of the persistent deficit is inflation, it cannot be corrected by devaluation. On the other hand, if the cause is price-cost disparity, the deficit should not be corrected by deflation. Finally, if the cause of the persistent deficit is a change in reciprocal supply and demand for exports and imports, part of the remedy will have to include a shift of productive resources from some industries to others. It may, in fact, be necessary to induce such shifts by some deflation and by devaluation. Where the balance of payments problem has complex causes, more than one remedy will have to be applied.

In an unpublished study in 1948, Mr. J. J. Polak showed that devaluation cannot be effective in correcting a large and persistent balance of payments deficit which is the result of a condition of overinvestment. A devaluation will, for a time, bring about a shift in the distribution of income, so that if wages lag, the proportion of income going to receivers of profits will rise. If a substantial part of these profits is saved, investment will not, for the time being, be excessive. The balance of payments deficit may disappear, accompanied by a corresponding reduction of consumption. Nevertheless, if wage earners are successful in restoring their previous real income, and investment is maintained as before, investment will again become excessive and the balance of payments deficit will reappear. In these circumstances, repeated attempts to eliminate a deficit through devaluation will simply reduce the foreign exchange value of the currency without solving the basic payments problem.

If the balance of payments problem arises exclusively from price-cost disparity, devaluation should, by itself, provide a full remedy. As a practical matter, a payments problem is not likely to be wholly the result of price-cost disparity. Inevitably, there will be some excess of current demand, since the economy would otherwise have unemployment equivalent to the balance of payments deficit. Furthermore, it is inconceivable that the price-cost disparity should be uniform and unaccompanied by shifts in reciprocal supply and demand, particularly if the payments difficulties are of long standing. For these reasons, devalua-

tion will have to be accompanied by some deflation; and the effects of devaluation will not be fully felt until the necessary shifts in investment have made possible the expanded production of exports and of substitutes for imports.

## Treating the deficit

Import and exchange controls are sometimes regarded as a method of meeting a balance of payments problem. If the problem is regarded as consisting merely of the deficit, then by definition import and exchange controls are a corrective to the extent that they actually hold down the deficit. On the other hand, if the problem is regarded as consisting of the imbalance in the economy that leads to excessive demand for imports relative to exports, controls are not a corrective. They merely assure that the effects will manifest themselves primarily on the domestic side of the economy. It would still be true that the pattern of production, consumption, and investment does not conform to what an appropriate price system would bring about. The real costs of the imbalance and distortion would still remain, except those that arise from the sale of some foreign exchange at less than its real value.

The fact that import and exchange controls are not a remedy for payments problems does not mean that their use can never be justified. When reserves are small, or when other measures are being taken to eliminate the payments difficulties, the temporary use of restrictions can be helpful in keeping the deficit within the means available to the monetary authorities. Apart from this, restrictions have been defended as a means of exploiting a quasi-monopolistic trade position through an overvalued currency. In other instances, restrictions have been defended as a means of providing protection for home industry. Such use of restrictions for commercial policy purposes does not bear on the question of the proper remedies for balance of payments problems.

It has been urged that flexible exchange rates provide a continuing and automatic corrective for balance of payments problems. The point that a completely free exchange market would involve continuous balance in international payments, even when balance would be undesirable, can be disregarded. Instead, it may be assumed that the monetary authorities intervene to minimize fluctuations in the exchange market when there is a temporary surplus or deficit, but do not intervene when there is a tendency toward a persistent deficit. Under such circumstances, a persistent deficit in international payments will not emerge, since the exchange market will find a rate at which the current account deficit (or surplus) is precisely equal to the net capital inflow (or outflow).

However, if the excessive aggregate demand is allowed to persist, and

its effects on the balance of payments are merely offset by a steady depreciation of the exchange rate, the cause of the payments difficulties has not been removed and a remedy for the problem has not been found. All that has been done is to make certain that the inflation will act wholly on domestic prices, incomes, and production. Apart from this, a free exchange market embracing capital transfers as well as current payments may lead to such excessive depreciation, if there is a capital flight, as to impose economic difficulties on other countries and cause an undesirable deterioration in a country's own terms of trade. A flexible exchange rate may be an expedient for limiting the pressure on inadequate exchange reserves; it does not eliminate the causes of balance of payments difficulties.

## How the Economy Adjusts the Balance of Payments

The typical case of balance of payments difficulties in the postwar period is one with multiple causes. Continued inflation brought about the absorption in consumption and investment of more resources than the economy could itself produce or secure from ordinary capital inflow. The excess was the balance of payments deficit. At the same time, the persistent inflation acted on prices and costs quite unequally in different countries, and often unequally on different sectors of the economy in the same country. Furthermore, the economic, political, and social changes during and after the war necessitated far-reaching adjustments in the structure of national economies which could not be made quickly.

The measures taken to deal with these payments difficulties were also varied and were made over an extended period of time. Much of the adjustment to structural changes was made in the course of reconstruction, when preference in allocating resources for investment was given to the industries best suited to expand production for export. The current inflation was reduced gradually as domestic production increased and investment was restrained. In 1949, a large number of countries acted to correct the price and cost disparity which impaired their competitive positions. Even after the devaluations, much remained to be done to eliminate current inflation and to complete the adjustment to structural changes. The revival of monetary policy after 1952 was a major factor in limiting or terminating the inflation in many countries. Adjustments to structural changes are still being made, although they are to a much less extent the consequences of wartime disruption and destruction.

The impact of these measures on the international payments of the countries that applied them successfully has been striking. It is no easy task to explain precisely how the improvement actually resulted from

the measures that were taken, particularly because it took place gradually over a number of years.

## Export and import elasticities

The approach generally taken by economists in explaining the improvement in the balance of payments following the application of remedial measures is to concentrate on the trade balance. Obviously, the improvement in the trade balance is equal to the increase in exports, plus the decrease (or minus the increase) in imports. Any explanation that accounts in full for the changes in exports and imports will explain the improvement in the trade balance.

Where devaluation has been an important component of the remedial measures, economists have tended, on the whole, to concentrate on the price effects to be expected from devaluation. The striking fact about devaluation is that it changes critical price relationships—the prices of import goods relative to domestic goods, the prices of export goods relative to all goods produced abroad, and the prices of export goods relative to domestic goods. The first and second price relationships are of special importance to industrial exporting countries; the first and third are of special importance to agricultural exporting countries. So long as domestic prices and costs do not change in a manner that offsets the effects of devaluation, a powerful new force is introduced into the economy to encourage exports and to discourage imports.

The rise in import prices relative to domestic prices will result in a reduction in a country's demand for imports. In the absence of controls, the decline in imports will depend on the elasticity of domestic demand for imports, in terms of relative price, and on the elasticity of foreign supply for the goods imported. The fall in export prices relative to foreign prices will result in an increase in the foreign demand for a country's exports; and the rise in export prices relative to domestic prices will result in an increase in the domestic supply of goods for export. These four elasticities of supply and demand for exports and imports, at home and abroad, are regarded as determining the improvement in the trade balance.

Discussions of the effects of devaluation have not, of course, ignored the significance of the behavior of the economy as a whole in the adjustment of the trade balance. Such analyses have often called attention to the repercussionary effects on the national economy (and the world economy) through the multiplier, and to the importance of taking into account the employment situation and the employment effects in connection with devaluation. This is especially true of a number of discussions of imports and employment, some of which antedate the devaluations

of the 1930's.[4] Nevertheless, in most analyses the basic forces acting on the trade balance are presumed to be those arising from the price changes brought about by devaluation, and the behavior of the economy as a whole is regarded as merely modifying the effects of these price forces.

Where a balance of payments problem is caused largely by price-cost disparity, the basic forces of adjustment undoubtedly work through the relevant supply and demand schedules for exports and imports. Even so, to take account of the effect on the trade balance of changes in the level of output and of aggregate demand, it is necessary to distinguish between short-run and long-run elasticities and to allow for the differences in the time needed under varying conditions before the long-run elasticities have their full effect.

### Changes in output and absorption

The practical case with which governments are usually confronted is one in which the balance of payments problem reflects some measure of current inflation as well as some degree of price-cost disparity. Conceivably the authorities might attempt to deal with such a problem by first eliminating the inflation, until there is no excess of aggregate demand. When such a policy would result in unemployed resources equal to the remaining balance of payments deficit, the residual payments problem is one of price-cost disparity with some accompanying structural maladjustments. The government could then proceed with devaluation to correct the price-cost disparity. Perhaps something could be said for such a policy; in fact, however, it is not the way governments act.

More often, governments are confronted with a balance of payments problem that seems to have become critical, either because reserves are near exhaustion or because speculation has suddenly aggravated an adverse payments position. The authorities may find that the situation calls for immediate action. They may have begun to apply deflationary measures designed to reduce or eliminate the excessive expenditure. In any event, it may already be clear that devaluation is a necessary part of the remedial program. The step is taken. In due course, there will be an improvement in the trade balance which is the joint effect of the two sets of measures, deflation and devaluation. The improvement in the trade balance may be analyzed in terms of the effects of the remedial measures on income and absorption, that is, on changes in total consumption and investment and changes in total output.[5]

[4] See, for example, Sir William Beveridge, *Tariffs: The Case Examined* (London, New York, Toronto, 1932), pp. 52–74; J. A. Hobson, *The Economics of Unemployment*, Appendix; and A. C. Pigou, *A Study in Public Finance* (London, 1949), pp. 218–27.

[5] Sidney S. Alexander, "Effects of a Devaluation on a Trade Balance," *Staff Papers*, Vol. II, No. 2 (April 1952), pp. 263–78.

The deflationary measures will act on aggregate expenditure, reducing home consumption and investment of import goods and domestic goods. There may be some increase in exports, if exports have been held back by the inability of the economy to satisfy demand from abroad. The deflationary measures will, of course, reduce production, unless exports absorb the resources set free by the reduction in home demand. The devaluation will also affect production and expenditure on consumption and investment. Unemployed resources, including those released through the deflation, will be employed in increasing the production of export goods and domestic goods. Aggregate consumption and investment may not be affected to any large extent by the devaluation, but there will be a reduction in absorption of imports relative to domestic goods. In various other ways, largely in response to higher prices, the economy will be induced to decrease aggregate expenditure relative to output.

The net effect of these measures in improving the trade balance will be equal to the increase in output plus the decrease in absorption. This will be equal to, but not identical with, the increase in exports plus the decrease in imports. It should be noted that if there was formerly any considerable amount of unemployment, there may be no decrease in absorption or even in imports; for the increase in income accompanying an increase in output may result in an increase in aggregate expenditure on consumption and investment approximating, and perhaps even exceeding, the increase in output. Under certain conditions, despite devaluation, the increase in absorption may involve some increase in imports, although obviously this will be much less than the increase in expenditure on domestic goods.

### Absorption versus elasticities

A complete analysis of the effects of the remedial measures on the trade balance in terms of output and absorption must also explain why improvement is divided, as it actually has been, between increased exports and decreased imports. And in answering this question, consideration must be given to the relevant elasticities—the marginal propensity to import in relation to aggregate expenditure, the elasticity of demand for imports, the elasticity of foreign supply of imports, the elasticity of supply of exports, the elasticity of foreign demand for exports, and other relevant functions. Similarly, any analysis of the effects of the remedial measures on the trade balance that starts with the response of exports and imports must, for completeness, continue with an analysis of output and absorption. The two methods are complementary, not alternative explanations of how the balance of payments is adjusted.

Nevertheless, it is preferable to start with changes in output and absorption, and to supplement such an analysis with the role of elasticities. The preference for the absorption approach, as an analytical technique, arises from the fact that changes in the balance of payments are partial manifestations of changes in the national economy as a whole. The absorption approach starts with the entire national economy and should move from there to the export-import sector. The elasticities approach seems to give excessive attention to the balance of payments as an independent, or quasi-independent, aspect of the national economy.

From the practical side, the absorption approach emphasizes the fact that balance of payments problems may have multiple causes and that the remedies may involve different types of measure. That approach can be used to explain the effect of any type of remedial measure on any type of payments problem. On the other hand, the elasticities approach seems to be directed almost entirely to explaining the effects of devaluation on a balance of payments problem arising from price-cost disparity. Finally, the absorption approach explains not only why there may be, in certain instances, a very large response to measures to improve the trade balance, but also why, in other instances, there may be little or no response. Unless the remedial measures affect the relation of output to absorption, there will be no means through which the elasticities can operate on the trade balance. Extreme differences of opinion on the effectiveness of devaluation in solving balance of payments problems arise in large part from neglect of the effects of accompanying monetary and fiscal measures and from failure to note the effects of devaluation on production and aggregate expenditure under varying conditions of employment.

## Devaluation, Prices, and Real Income

When a serious balance of payments problem has been allowed to persist for a number of years, the distortions that arise in the economy will be of a kind that cannot be remedied without devaluation. It is a fact that governments do not like to propose formal devaluations of their currencies. The reasons for this attitude are partly political, partly economic. In a sense, devaluation is an acknowledgment that the government has failed to meet the balance of payments problem in ample time and through other measures. Understandably, governments do not like to admit this. There is more to the opposition to devaluation, however, than political distaste. There is a genuine belief that, coming after an extended period of rising prices, devaluation will intensify the difficulty of dealing with the inflation problem by causing a rise in prices.

## Devaluation and Inflation

Inflation involves an excess of expenditure over the value of available output, including net capital inflow, at constant prices under conditions of full employment. The consequences of inflation are manifested in two directions: by a rise in domestic prices and by a balance of payments deficit. In a country with a fixed exchange rate, the effect of a given excess of expenditure will tend to be concentrated in greater degree on the balance of payments, the longer the inflation continues. In the beginning, the excessive expenditure will be used in great part to raise the price of domestic goods. Once prices have risen, a larger proportion of the excessive expenditure will be directed toward import goods, as their relative cost will, by then, be much lower. If the excessive expenditure does not keep growing, the entire impact of the excessive expenditure may, after a time, be on the balance of payments. Under such circumstances, there may be the paradox of inflation with stable prices, although prices will be at a level too high for the competitive position of the country.

This is not in accord with the type of analysis which identifies inflation with the rise in prices and may even regard the amount of the price rise as a measure of the inflation. Of course, if a rise in domestic prices is to be the sole test of inflation, then a balance of payments deficit is not only excluded as an indication of inflation, but it becomes an anti-inflationary force. The same excessive expenditure will be regarded as more or less inflationary, depending upon the propensity to import and the elasticity of substitution of import goods for domestic goods. And a measure such as import controls, which may not be directly related to aggregate expenditure and to output, will be regarded as inflationary because it compels more of the excessive expenditure to be directed to the purchase of domestic goods and thus induces a greater rise in domestic prices.

Any measure which increases aggregate expenditure more than the value of available output at constant prices is inflationary, and any measure which increases the value of output more than aggregate expenditure is deflationary. This definition of inflation is obviously well-suited to the absorption analysis of balance of payments problems. While devaluation, under conditions of full employment, may result in a reduction in aggregate expenditure relative to available output, such behavior is primarily a response to the rise in prices and not to the devaluation. Devaluation may be one of the means of eliminating the price and income distortions created by inflation. Indeed, devaluation may be an essential part of the process of change from inflation to stability.

In general, devaluation is neutral with respect to increasing or decreasing inflationary pressures. There is one case, however, in which devaluation will cause a reduction in aggregate expenditure relative to available

output. Assume that a country with full employment has a balance of payments deficit on current account which it must keep from exceeding a stated sum in dollars, representing capital inflow or aid. Because of excessive expenditure and an overvalued currency, the deficit exceeds the prescribed limit. After devaluation, importers will pay more for the exchange for their imports, and exporters will receive more for the exchange from their exports; this represents a transfer of real income from importers to exporters. The government will also receive more from the importers for that part of the foreign exchange representing aid; this may be sufficient to eliminate the excessive expenditure and to bring aggregate expenditure into balance with output plus aid.

### Devaluation and prices

The practical problem is not so much the effect of devaluation on inflation as its effect on prices. The answer is by no means simple. Consider the case of a country with a free economy, in which there is neither price control nor exchange control, there is no unemployment, and there is a balance of payments deficit. Assume that devaluation is accompanied by measures designed to reduce aggregate expenditure, so that consumption and investment will equal output and there will be no balance of payments deficit. How will prices behave?[6]

As far as the prices of import and export goods are concerned, their price behavior will depend on supply and demand elasticities at home and abroad. On the assumption that the devaluing country is small relative to the world economy, import prices will tend to rise approximately in proportion to the devaluation, domestic prices will tend to rise to the extent of the higher cost of their import content, and export prices may rise by as little as domestic goods or as much as import goods. For industrial exports sold primarily in domestic markets, the tendency will be for export prices to behave like domestic prices. For raw material exports sold in world markets, the tendency will be for export prices to behave like import prices.

Consider another case, that of a country without price controls but

[6] This discussion is directed toward the behavior of prices when a single country devalues its currency, its proportion of world trade being relatively small. For a discussion of the behavior of raw material prices when a whole region, say the sterling area, representing a sizable proportion of world trade in these commodities, devalues its currencies, see Barend A. de Vries, "Immediate Effects of Devaluation on Prices of Raw Materials," *Staff Papers*, Vol. I, No. 2 (September 1950), pp. 238–53. In perfect markets, where dollar and sterling prices will be equivalent at the new rate of exchange, the fall in the dollar price of each commodity will be such as to induce a decrease in the supply from the dollar area plus an increase in the demand of the dollar area equal to the increase in the supply from the sterling area plus the decrease in the demand of the sterling area induced by the associated rise in sterling prices.

with import controls. In such a country, the prices of import goods will not be at their landed cost, but at a level determined by the demand and the restricted supply. Assume that the devaluation is accompanied by measures designed to restrict aggregate expenditure to the proper extent. Under such conditions, devaluation will raise the landed cost of import goods; but it will not raise the actual prices at which imports are sold in local markets unless the devaluation is greater than the premium that prevailed for import goods. In fact, if the devaluation encourages an expansion of exports, it may be possible to increase imports, and the prices of import goods may even decline. The behavior of export prices will depend upon the nature of the export goods—rising almost to the extent of the devaluation for raw material exports, behaving much like domestic goods in the case of industrial exports. The prices of domestic goods should not change significantly in either direction.

In a world in which import and exchange restrictions have become much more common and in which severe restrictions are likely to precede devaluation for an extended time, this case seems to be of special importance. If the inflation has been deflected to the domestic sector through rigid import and exchange controls, a devaluation which reflects the degree of price-cost disparity that has been built into the economy will have no significant effect on prices. This is a conclusion that can be supported by the experience of a number of countries in which devaluation was accompanied by successful measures to eliminate the current inflation. In India, for example, wholesale prices and the cost of living in terms of rupees were lower in 1955 than they were in 1949.

### Devaluation and real income

Another objection frequently made against devaluation is that it will result in a deterioration in the terms of trade and in a reduction in the real national income. This argument seems to have some, but in practice quite limited, validity. There is far greater danger of reducing real national income through excessive restriction of imports than through devaluation. A country exporting more or less specialized industrial goods will be able to keep part of its export markets even if its prices have risen relative to those of other exporting countries. The volume of its exports will, however, be less, and perhaps much less, than they would be at more competitive prices. In order to prevent an unmanageable balance of payments deficit, import and exchange restrictions may be imposed.

Assume that a country in this position decides to devalue in order to eliminate the price-cost disparity and thus induce an expansion of exports and a contraction in the excessive demand for imports. The prices of its imports (landed cost) will rise in national currency approximately in proportion to the devaluation. The prices of its exports in national cur-

rency may rise relatively little. For each unit of import goods, the country will now give somewhat more than a unit of export goods, values being taken on the predevaluation basis. The terms of trade will have deteriorated. If output is valued in such a way that each unit of imports is regarded as equivalent to the exports that were necessary to pay for it prior to devaluation, real income will be lower after the devaluation than it was before.

No doubt there are cases in which a country's position as a supplier of exports or as a buyer of imports is so important in the world market that the country can, through an overvalued currency, secure better terms of trade. Any attempt to exploit the terms of trade, however, will be at the cost of a reduction in the availability of import goods. It is by no means clear that proper valuation of import goods will show that real income has been reduced by a devaluation necessary to secure an expansion of exports and, therefore, an increase in imports. Any system of valuing imports at their landed cost in national currency must show a fall in real income as a consequence of devaluation. On the other hand, if imports are valued at their actual prices in a free internal market, the devaluation may result in a rise in real income.[7] Computations of this sort, which depend on the unit values selected for measuring real income, are obviously not very reliable bases for far-reaching conclusions on the effects of devaluation on real national income.

The basic question is whether the cost, in alternative consumption and investment, of providing the additional exports, following devaluation, is more than offset by the acquisition of the additional imports. Without attempting a refined analysis of this problem, it is possible to state certain conclusions. On the assumption that exports can be expanded substantially at the same real cost, the well-being of a country is likely to be increased by devaluation if its import restrictions have had to be severe and if the price elasticity of demand for its exports is relatively high. For the countries that devalued in 1949, there can be little doubt that real income, properly defined, was increased by the whole series of measures taken to strengthen the payments position.

[7] Taking the market value of imports at the predevaluation date, real income will rise whenever $P/P'$ is less than $(e - 1)/e$, where $P$ is the landed cost, $P'$ the real market value, and $e$ the elasticity of demand for a country's exports.

# The Use of Bilateral Agreement Currencies for Trade with Third Countries

**Barend A. de Vries and F. A. G. Keesing***

MOST TRADE for which payment is made through a bilateral payments agreement consists of goods originating in one partner country and destined for the other. This, clearly, would normally be expected, in accordance with the rules applying to a bilateral trade and payments relationship. During recent years, however, the payments channels between various pairs of bilateral countries (A and B) were frequently used to settle trade transactions of a different nature, involving trade between one or both of the partners with a third country (C). This situation arose if a payment through a bilateral agreement account was made from B to A[1] either for the import of goods into B, originating not in A but in C, or for the export of goods from A, destined not for B but for C.

It is clear, however, that in both cases there had to be some further arrangement which closed the transaction. Conceivably, a direct payment was made by A to C (case 1 in Diagram 1), or, alternatively, a direct payment was made by C to B (case 2 in the diagram). In such cases, the total three-cornered transaction consisted of one direct commercial transaction and two transfers, both of which were in conflict with normal currency prescription regulations.

It is also possible that one of the bilateral partners might have acted as a commercial go-between, re-exporting or selling in transit C's goods to the other partner (case 1a in Diagram 1), or the other partner's goods to C (case 2a in the diagram), while itself arranging payment in either direction. Under these conditions, there would not have been any direct contacts, either commercial or monetary, between the country of origin and the country of destination of the goods concerned. The total arrangement would have consisted of a transit transaction (which might or might

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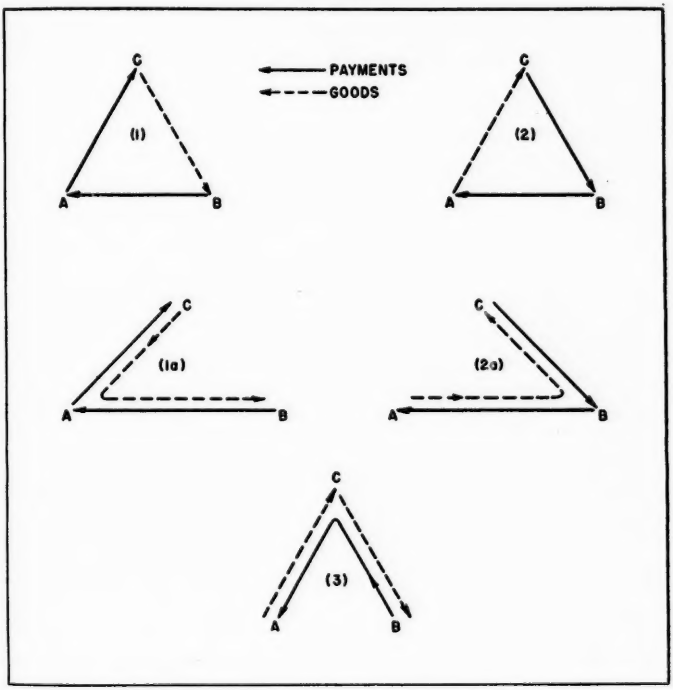
[1] Throughout this paper, "B" represents the bilateral country which makes, and "A" the bilateral country which receives, a bilateral payment.

not have been in accordance with the trade rules agreed between A and B), combined with two independent transfers. The problems relating to transit trade (including the complications of switch trade which might arise in that context) will not be further examined in this paper.

It is finally possible that the triangle was closed not by a payment but by a second commercial transaction (export from A to C, export from C to B). This type of transaction (case 3 in Diagram 1) normally gave rise to a so-called cheap currency quotation in a hard currency market. It consisted of two separate direct commercial transactions, settled by one payment through a bilateral payments agreement, which conflicted with normal currency prescription regulations. If the importer in B was in direct touch with the exporter in A, settlement between the two traders in C (if they were different people) had to be arranged in C's local currency. From the point of view of C, such a transaction would have been tantamount to a three-cornered barter deal. Technically, C might have

DIAGRAM 1



found such an exchange very difficult to organize. In practice, therefore, this type of transaction was generally carried out in a roundabout way. The exporter in C sold his goods to B against a "transit" payment of a claim under B's bilateral agreement with A. He subsequently sold this claim to the importer in C, who used it to settle his import from A. The technical aspects of such a "transit" payment will be explained later.[2]

Case 3 might assume a more complicated shape, if either C's imports or its exports were organized by one of the bilateral countries as part of a transit arrangement. Under these conditions, B would re-export A's goods to C, and the total transaction would be a commercial switch, consisting of one transit transaction of type 2a, plus a direct commercial transaction, paid for directly. Alternatively, the accompanying direct commercial transaction might develop into another transit transaction.

It follows from the foregoing that the one common element in the transactions under consideration is the use of a bilateral payments channel to pay for trade transactions with a third country. Such a payment is made in order to settle a commercial transaction in respect of which A (the bilateral recipient) does not supply the goods which B (the bilateral payer) obtains, and/or B is not the destination of the goods which A delivers.

Two questions arise in this connection: What technical conditions must be satisfied to make it possible to use a bilateral payments agreement for indirect payments? What economic interests are involved in this type of payment? These two questions will be examined in turn.

## Technical Conditions

The technical rules which govern a strictly bilateral relationship between two countries, and which must be circumvented or set aside if there is an indirect or a "transit" payment, may be summarized as follows: First, under a payments agreement, only residents of a country that is a partner to the agreement can open accounts and hold balances in the other partner country. Second, only claims and debts, in respect of mutually admitted transactions, between residents in the two partners to the agreement can be settled through the transfer of a balance held in an account opened under the payments agreement. Third, in order to qualify for settlement through the agreement, a commercial transaction between the two partners must be in respect of goods originating in one partner country and bought by the other for its own use or consumption.

[2] See page 180.

Several controls are necessary to supervise these conditions and to safeguard the bilateral nature of a trade and payments relationship.

If payments between A and B are centralized, there will be either one account, opened by one central bank in the name of the other, or two accounts, opened by each central bank in the other's name, depending on the type of agreement. All monetary control will then be effectively vested in the central banks.

If payments are decentralized, there will, in addition to the account(s) held by the central bank(s), be other accounts, opened by authorized banks in one country in the names of authorized banks in the other country. This arrangement necessarily delegates some controls to the authorized banks. The role played by these banks may be small if they act only as agents for the central banks. But if they are entitled to hold and handle their own currency balances, they will be more independent, although they still will function within the framework of existing exchange control regulations, and possibly be subject to specific limitations imposed by their central banks.

As long as surrender requirements are fully enforced, no private entity (other than authorized banks) can hold balances under a payments agreement. If surrender requirements are waived, private entities may be permitted or required to hold and to handle their own balances, but normally only through the intermediary of an authorized bank.

Each central bank or authorized bank, as the case may be, has to check and certify that any amounts transferred through the agreement to the partner country are paid for the account of a resident of its own country, and in respect of a transaction that has been duly authorized. The same applies to a bank which receives payment through the agreement.

Each central bank must impose prescription regulations that link the settlement of claims and debts under a bilateral agreement to transactions effected between the two countries concerned. In addition, commercial controls are necessary to ascertain the origin of the goods imported from the partner country. The exporting country may be asked to certify the origin for the benefit of the importing country. The exporting country, furthermore, may have to ascertain in its own interests whether goods exported from its territory are in fact dispatched to their alleged destination. The importing country, finally, may be requested by the exporting country to ensure that goods which it imported from the partner country are not offered for re-export.

A complicated set of controls is thus likely to be required to guarantee that both payments and underlying transactions between two countries are and remain purely bilateral These controls are both monetary and commercial. Some of them require close cooperation between exchange

authorities and customs authorities. Part of the monetary controls may be delegated to authorized banks. The intensity of the controls may vary with the general restrictiveness of the currency regime concerned. In certain cases, the controls in one country depend on statements made by the other country, which the former may not normally try to verify.

Indirect payments through a bilateral agreement can be arranged only under one of the following conditions: (1) an ad hoc agreement between two bilateral partners to deviate from the rules of pure bilateralism; (2) general relaxation of controls in one or both partner countries, resulting in *de facto* abandonment of bilateralism; (3) connivance by the control authorities in one country at practices with which the partner country does not necessarily agree; (4) circumvention of the controls by private traders.

An ad hoc agreement between two partner countries to deviate from the normal procedure of bilateralism may affect either the commercial or the monetary rules. The partners concerned may agree that, under specified conditions, all or some goods imported by one of them and paid for in accordance with the terms of the agreement need not originate in the other country, or, alternatively, that goods imported by one country and paid for under the agreement may be re-exported, or sold in transit. Or the partners may agree that a payment under the agreement shall be accepted for a commercial transaction between either of them and a third country.

A general relaxation of controls by one or both partners may involve the introduction of limited or unrestricted transferability of the bilateral balances held under various agreements. The introduction of transferability by one partner country for the benefit of others constitutes a facility which the others are welcome to use if they see fit.

Controls may be relaxed in a different way if one partner country, while officially and generally maintaining controls, allows its residents in certain cases greater freedom than would normally appear compatible with the rules of its bilateral arrangements. It may happen that the other partner country accepts these deviations, but it is also conceivable that the partner may find its interests damaged by the deviations.

Finally, private traders may succeed in dodging certain controls, especially those barring transit trade and/or prescription regulations, despite the best efforts of the authorities concerned to ensure their enforcement.

## Economic Interests

Private traders have a commercial interest in buying and selling goods in the most advantageous markets, unencumbered by discrimina-

tory quota provisions and rules of bilateralism, which restrict their freedom of action. Their motive is to make a commercial profit. From the traders' point of view, profit possibilities are determined by the prices in various markets, recalculated at the rate of exchange between the foreign currencies concerned and their own currency. A private trader has no direct interest in particular currencies for their own sake. He has an indirect interest, however, to the extent that broken cross rates may affect his profit possibilities, and that either acceptance or availability of particular currencies may allow him to carry out certain profitable transactions that could not otherwise be concluded. This means that, in various cases (transit trade, circumvention of discriminatory restrictions, currency arbitrage through commodity transactions), private traders may see their profits increased if they can arrange roundabout transactions and/or apply unusual payments procedures. If these transactions are believed to be against a country's interests or inconsistent with its international commitments, the government may try to prevent them. But if the government has no strong negative feelings, it may not attempt to check the roundabout transactions, and it may even encourage them.

The interests that the exchange authorities themselves have in arranging, allowing, or condoning the use of bilateral balances for purposes outside the usual scope of the payments agreements involved may be of either a monetary or a commercial nature. Some governments have felt that such payments should be encouraged as a matter of general monetary policy and, therefore, have established certain conditions under which the automatic transferability of balances owed under various payments agreements is allowed. More frequently, however, the monetary considerations which prompt governments to waive the rules of monetary bilateralism are of an ad hoc nature. Those considerations arise notably when claims or debts under certain bilateral relationships have become excessive, and means are sought to correct the situation.

Normally, an excessive bilateral balance ought to be reduced by increased exports from the debtor to the creditor country, or by a payment in gold or in a third currency, but there may be reasons why a different procedure is applied. If B is the creditor in the bilateral relationship, a payment by B to A for goods imported by B from C, or exported by A to C, would likewise reduce B's excessive creditor position. For this purpose, the commercial transaction should present certain advantages for either bilateral country involved, or it should be acceptable to B—even at some sacrifice—if there is no other obvious way of reducing its outstanding claims.

Either government concerned may arrange the transaction necessary to attain the reduction of the bilateral balance (possibly, but not neces-

sarily, in agreement with the authorities of one or both of the two other countries concerned),[3] or it may offer to its residents inducements or facilities (waiver of currency prescription, waiver of surrender requirements, import facilities outside usual quota provisions, broken cross rates, special import or export rates, etc.) that are likely to produce the desired result.

From the commercial point of view, a government may feel that its own discriminatory import policy, inspired by currency considerations, may be causing difficulties, since it deprives the country of desirable goods. Alternatively, it may find that its lack of competitiveness prevents it from selling certain export products in certain markets, although it may be eager to export those goods or to retain those markets, or both. In such situations, its aim may be to correct the trade situation by arranging or permitting indirect imports or exports (as the case may be). Since these transactions could not take place if they had to be paid for in the normal way, they have to be settled indirectly, i.e., in an inconvertible currency.

In some cases, commercial and monetary interests may run parallel. Under those conditions, a country may be able to arrange certain commercial transactions which it deems interesting and, at the same time, to correct the position of a bilateral payments agreement. In other cases, however, trade interests may prevail, and indirect payments may be used as a means to an end; the result may be that the position of the payments agreement, through which the settlement takes place, becomes more unbalanced than before, or it may be that the bilateral balance remains unaffected.

Whatever the motivation for transactions of the character described above, they may occur in three kinds of situation: First, the transaction may be commercially profitable at prevailing prices and under the existing exchange facilities; in that event, traders either will avail themselves of the opportunity without government permission, or will respond as soon as the authorities extend the necessary licenses. Second, if the special transaction can be carried out only at a loss at prevailing prices and under existing exchange facilities, the government will, if it wishes its traders to play their part, offer some kind of inducement (usually of a multiple currency nature) to compensate traders for the commercial loss they would otherwise incur. Third, if a loss is involved, the authorities themselves may decide to bear it, if they consider the transaction to be in the public interest.

[3] If the third country does not have currency regulations, its authorities will not be involved.

CASES 1 AND 2

Examples of cases 1 and 2 (Diagram 1) frequently arise when there are possibilities for the administrative or automatic transferability of balances from an account in one bilateral agreement to an account in a different agreement.

In the case of automatic transferability, an importer in one bilateral country can pay a supplier in another bilateral country in a third currency. The country whose currency has been made transferable will play the intermediary role which is necessary to effect the indirect payment. An export from Italy to Norway, for instance, could be paid for in sterling.[4] Instructions on behalf of the Norwegian importer would be given to a U.K. authorized bank to debit a Norwegian sterling account and to credit the corresponding balance to an Italian sterling account.

Administrative transferability is sometimes practiced by Egypt. It may happen that Egypt wants to export cotton to, say, Japan, on which it has a bilateral claim, while at the same time it has a bilateral debt in its agreement with Greece.[5] Such a situation would set the stage for an indirect payment through the Greek-Egyptian agreement, provided the Greeks are willing to receive and the Japanese to make an equivalent payment through the Greek-Japanese agreement. If the three exchange controls concerned give their consent, the transaction might develop in the way indicated. From the Egyptian point of view, the result would be that the cotton export to Japan does not increase its bilateral claim on Japan and helps to reduce its bilateral debt to Greece. In 1952, Sweden reduced its excessive debtor position vis-à-vis Japan by deliveries of rice from Thailand. At that time, Japan could not increase its direct rice purchases from Thailand without exceeding its quota under the Japanese-Thai trade agreement. In several cases, transactions of this type are carried out as transit transactions. For example, in order to reduce its debtor position with Brazil, Finland has re-exported to Brazil—against payments through the Brazilian-Finnish accounts—Argentine grains and commodities originating in West Germany, Sweden, and the United Kingdom.

If the transactions described above do not form a substitute for any country's right to claim gold or dollars for a balance in excess of the swing, they are likely to be carried out on a straightforward basis. This means that the commercial transaction will probably be concluded at its usual price, and that the two payments will be made at the correct

[4] Illustrated by case 1, Diagram 1. For C in the diagram, read "Italy"; for B, read "Norway"; for A, read "United Kingdom."

[5] Illustrated by case 2, Diagram 1. For A in the diagram, read "Egypt"; for C, read "Japan"; for B, read "Greece."

cross rates. The situation may be different, however, if the indirect payment through the bilateral agreement is arranged in lieu of a hard currency payment in the opposite direction, in order to reduce a balance in excess of the permitted swing.

Although many bilateral agreements provide for settlement in dollars beyond a certain point, debtor countries often do not actually pay dollars to their bilateral creditors when the need arises. This may be due to the fact that the debtor's dollar position renders it difficult or practically impossible to make such payments, while the creditor country perhaps does not want to press too hard lest it endanger its export possibilities. It may happen that, under these conditions, the two bilateral countries concerned agree upon a different procedure, which replaces the payment of dollars from A to B by a payment through the agreement from B to A, for goods imported by B from, or exported by A to, the dollar area.

In such a situation there are the following possibilities. The bilateral debtor may be willing to make dollars available for the purchase of U.S. commodities to be shipped to the creditor country, rather than pay dollars directly to the creditor country.[6] The latter will pay for the U.S. goods through the bilateral agreement, thus reducing its excessive claim. The reason for this devious procedure may be that the creditor country is restricting its direct dollar imports, and that, consequently, dollar goods can be sold in its market at a certain premium. Under those conditions, the debtor country may be able to discharge its bilateral debt at a somewhat smaller sacrifice in dollars than if a direct dollar payment were made to its creditor. Apparently, the creditor country stands to lose, since it might have imported the same dollar goods at a lower price, if it had actually received the dollars due to it. It may, however, be willing to take this loss as the second-best possibility for reducing an excessive claim. Alternatively, the loss might be recouped if the creditor should allow the dollar goods to be resold to a third country at a profit.

Similar results may be obtained by a transaction of a different kind. The debtor country may undertake to export certain goods to the United States, the proceeds from which will be turned over to the creditor against a payment by the latter through the bilateral agreement.[7] More usually, however, the bilateral creditor would re-export the debtor's commodities to a dollar country. Since soft currency goods exported to the United States are likely to yield less than when sold to a bilateral partner, this method is equally likely to present complications. The creditor country to which this solution is offered in lieu of a direct

[6] Illustrated by case 1, Diagram 1. For A in the diagram, read "Debtor"; for C, read "United States"; for B, read "Creditor."

[7] Illustrated by case 2, Diagram 1. For A in the diagram, read "Debtor"; for C, read "United States"; for B, read "Creditor."

dollar payment would be faced with the same considerations as would arise in the previous case.

It may happen, of course, that the export from A to C is carried out with B as an intermediary, or from C to B with A as an intermediary, and not directly. If the trade transaction is arranged directly, both bilateral countries will probably be in agreement about the settlement involved. This may still be so if a transit transaction is organized, since the use of the other bilateral country as an intermediary may be purely a matter of convenience. A transit transaction may be necessary, however, because there is no agreement between the two bilateral countries concerned about the triangular transaction. One partner (either the debtor or the creditor) may take the initiative to correct a payments situation in accordance with its own convenience, but in a way of which the other bilateral country may not approve, or about which its opinion is not asked. The commercial transaction, although in reality a transit transaction, may then have to be disguised as a direct transaction.

Several cases are known in which countries have adjusted their bilateral debtor positions in excess of the swing by making special dollar allocations to their traders for the purchase of dollar commodities to be delivered to the creditor against payment via the agreement account, thereby obviating the need to settle with cash dollars the balances in excess of the swing. Arrangements of this nature have, for instance, been used in connection with excessive bilateral debtor and creditor positions vis-à-vis Japan. In the late months of 1952, West Germany and Sweden adjusted their debtor positions with Japan by selling Cuban sugar and other hard currency commodities to Japan against payment via the agreement account. The bilateral trade and payments agreement between Indonesia and Japan provides that Indonesia may offset part of its debtor position by selling to Japan dollar commodities up to US$15 million per year over the period 1952–57. Japan itself sold dollar commodities to West Germany and Sweden in late 1953, when an excessive creditor position had developed in favor of West Germany and Sweden.

During 1952 and 1953, West Germany imported approximately US$14 million of dollar goods at premium prices, paid via its agreement account with Yugoslavia, and frequently invited similar imports payable in bilateral currencies. During 1952, when the United Kingdom was making 100 per cent dollar payments to the European Payments Union, the U.K. authorities set up the "dollar commodity arbitrage scheme," whereby U.K. merchants were authorized to purchase raw materials and foodstuffs for dollars, for resale to EPU countries against payment in sterling. The main purchasers of the dollar commodities resold by the United Kingdom appear to have been merchants in West Germany and the Netherlands. Although creditor countries seem frequently to have

agreed to the sale of dollar commodities payable through a bilateral agreement account, in some cases the creditor country refused such offers since the premium demanded by the debtor country was considered too high.

### Case 3

As has been shown above, cases 1 and 2 involve one commercial transaction (whether carried out directly or in two stages as a transit transaction), combined with two payments. Either the bilateral country receiving payment through the agreement gives up some other currency, or the partner making payment through the agreement is reimbursed in another currency. In case 3 (Diagram 1), on the other hand, two different commercial transactions are combined with only one payment. A third country imports from one bilateral partner and exports to the other, the settlement being made through the monetary agreement between the two bilateral countries.

This combination of transactions may be carried out on a prearranged basis, each country expressing its agreement about the various elements involved (type of good, price, manner of settlement). As previously mentioned, however, a different technique is more likely to be followed. The two commercial transactions are more likely to be concluded on their separate merits, the linking element being provided by the negotiation of an agreement balance in a hard currency market.

The third country involved in this type of transaction is not likely itself to have payments agreements with the other two. If it had, there would be little reason for the complications to which a transaction of this type gives rise. On the other hand, if the third country is a hard currency country, all parties involved may have an interest in the three-cornered arrangement, if the following conditions are met:

(1) Some traders in the third (hard currency) country must be interested in certain export transactions which cannot normally be concluded, since the soft currency importing country lacks the hard currency required and consequently discriminates against the commodities concerned.

(2) Other traders in the third (hard currency) country must be interested in import transactions which cannot normally be concluded, since the soft currency exporting country is not competitive at hard currency prices.

(3) The soft currency importing country must either be eager to receive the hard currency goods concerned against payment in a soft currency, or it must be anxious to reduce a net creditor position in a bilateral payments agreement and willing to import certain hard currency goods for that purpose.

(4) The soft currency exporting country must either be eager to export certain goods which it is unable to sell at hard currency prices, if necessary against payment in soft currency, or it must be anxious to reduce a net debtor position in a bilateral payments agreement and willing to forego dollar earnings for exports of certain goods to a hard currency country. This condition, however, may not apply if the commodities concerned are sold in transit without the knowledge of the exporting country.

Under a transaction of this type, a soft currency country (B) offers to buy certain hard currency goods against a "transit" payment to a dollar area exporter (usually a U.S. exporter) of a claim which it holds in a bilateral agreement concluded with country A. The U.S. exporter sells his claim to a U.S. importer, who is interested in buying certain commodities in country A.[8] The U.S. importer then "retransfers" the bilateral balance to the exporter in the latter country, thereby canceling the original claim. The U.S. importer will be prepared to purchase B's bilateral claim on A only at a discount, since it must be assumed that the exporting country is not competitive. The U.S. exporter will insist, therefore, that the amount in soft currency which he accepts in payment shall exceed its dollar equivalent, calculated at the official rate. As a consequence, the hard currency goods imported by B will be paid at a soft currency price and not at the (lower) hard currency price. The whole transaction, which could not have been carried out on a hard currency basis, materializes because of the sale of a bilateral balance at a discount by a U.S. exporter to a U.S. importer.

The technique of this sale must be examined more closely. A bilateral balance in a payments agreement cannot be transferred from hand to hand, like a banknote. It consists of a book entry, according to which a resident in one of the two countries holds a claim on a resident in the other, the residents concerned probably being authorized banks. There are normally only two ways in which such a claim can be passed on: it can be transferred to the name of a different resident of the country holding the claim, which leaves the status of the balance unchanged; or it can be transferred to the name of a resident of the country on which the claim is held, in payment for a transaction admitted under the agreement. This second way of passing on the claim extinguishes it as far as the bilateral agreement is concerned, since the nonresident balance (as viewed from the latter country) is thereby changed into a resident balance. In most cases, the claim will be registered in the books of the debtor country.[9] Any transfer, therefore, requires an instruction by the

[8] Illustrated by case 3, Diagram 1. For C in the diagram, read "United States."

[9] The "debtor country" in this context, the country which owes a debt to a bilateral partner, is not necessarily synonymous with "net debtor country." Under many bilateral payments agreements (i.e., those which provide for ac-

creditor to the debtor. Such an instruction must be compatible with the rules of the bilateral agreement. It appears extremely unlikely that under a bilateral agreement a person who is not a resident of either country could officially hold a balance in an agreement account. It follows that a balance under a payments agreement cannot be directly delivered to a U.S. exporter who might be willing to accept it in payment.

Any use of "agreement currencies" for transactions with U.S. exporters and importers, therefore, can be arranged only in a roundabout fashion. The balance has to remain outstanding in the name of a resident of the country which holds the claim, even though it is "transferred" to a U.S. exporter.[10] The nominal holder of the balance agrees, however, to act as the agent of the U.S. exporter, and, subsequently, of the U.S. importer to whom the balance is sold at a discount. The latter can discharge his debt in soft currency only via the payments instruction which the nominal holder will give on his behalf to a bank in the debtor country. In practice, all parties may act through the intermediary of a single person, who acts as a link between the nominal holder, the U.S. exporter, and the U.S. importer.

Various dealers who act as intermediaries for this type of transaction issue lists of quotations, showing the discounts at which agreement currencies are being negotiated. In this connection, "agreement currency" stands for "a payment through the bilateral agreement between X and Y (expressed in whatever currency is used in that agreement as currency of account), payable by X to Y," or "payable by Y to X," as the case may be. "Discount quotation" stands for the percentage of discount of the clearing currency, so defined, compared with the relevant currency's official rate in terms of dollars.

It should be emphasized that an agreement currency is identified both by the contractual payments relationship between two countries and by the direction of the payment to be made. If a quotation shows a certain discount for "clearing dollars, X to Y," it means that X is importing dollar goods against payment in soft currency, while Y is similarly exporting its goods to the United States. If the quotation is for "clearing dollars, Y to X," it indicates that Y obtains dollar commodities, and X is doing the exporting. In practice, both quotations (referring to the

counts to be opened in each partner country), there usually are claims and debts in both directions, the net position being determined by compensation of the accounts concerned. Although, at any given moment, there can be only one net creditor and one net debtor, each country may, at the same time, be both the other's debtor and the other's creditor with respect to individual balances before compensation.

[10] It follows from the above that "the country which holds the claim" is not necessarily the net creditor.

same bilateral payments agreement, but applying to payments in opposite directions) may appear side by side. The economic significance of simultaneous quotations for payments in opposite directions will be explained later.[11]

It is evident that a market where agreement currencies are traded under the above conditions cannot normally be considered a free exchange market. A clearing currency which is traded at a discount quotation is not just another quantity of effectively circulating international purchasing power; it remains a book claim locked up in a bilateral agreement, and usually inseparable from the commodity transactions which accompany it on its somewhat unorthodox excursion through a third country.[12]

The conditions under which a bilateral country, B, may be willing to part with a claim on partner country, A, will be determined by the general restrictiveness of B's dollar import regime, by the type and price of the particular dollar goods which it may want to buy against soft currency, and by the position of its bilateral payments agreement with A. The last factor may exercise its influence indirectly, B being more ready to agree to the purchase of nonessential goods from C (presumably at a higher price in B's own currency) if its claim on A happens to be excessively large. The effective discount resulting from these considerations must be such as to enable a U.S. importer to buy certain commodities in A on an attractive basis. At the same time, A must be willing to approve or to tolerate the export of those goods to the United States against soft currency. Alternatively, the transaction must lend itself to being disguised in such a way as to evade A's trade or prescription of currency regulations, if A should not be willing to cooperate.

It may take considerable time and ingenuity to arrange these transactions and to bring all parties together at the right moment. Normally, C's goods will not be shipped to B, and the transaction between C and B will not be regarded as closed, unless the transfer from B to A has been effected and confirmed by the recipient bank in A. As a consequence, there is no way of foretelling whether a special transaction will turn out to be feasible, and what amounts it will involve. If one transaction has been approved or secured, the value of the other will have to match the amount of the bilateral balance used in the first transaction. In addition, traders may find it difficult to reach agreement on prices and other conditions, especially since prices will be related to the discount for the agreement currency in terms of dollars, and the latter may be determined only in the final stages of the negotiation.

[11] See pages 191–92.

[12] This does not apply fully to transactions with a dollar country financed in transferable sterling, since sterling balances can, in fact, circulate without hindrance among non-dollar countries.

In practice, therefore, the markets for "cheap" bilateral agreement currencies are likely to be narrow and erratic, and quotations may be intermittent.[13] Unless information about the underlying transactions happens to be available, it is difficult to judge the economic importance of any quotation that may be published from time to time. The discount allowed on a certain inconvertible currency held in a bilateral account with another country does not necessarily reflect that currency's real purchasing power in terms of dollars.

Furthermore, not all the discount quotations which may be obtained are "cheap currency" quotations, arising under a case 3 transaction. Some are theoretical calculations, in terms of dollars, of soft currency premiums established by case 1 or case 2 transactions, which do not involve the sale of inconvertible balances by a U.S. exporter to a U.S. importer.

From the point of view of the soft currency importing country, a case 3 transaction gives rise to a "switch import."[14] Since the customs officials are frequently able to check the country of origin, particularly of some staple commodities and of U.S. finished products, it seems that a soft currency country can exercise some control over these imports. In addition, it appears unlikely that an authorized bank in the importing country would "sell" a bilateral balance to a U.S. exporter (in clear conflict with the rules of the bilateral payments agreements concerned), if the central bank of the importing country were known to be opposed to such dealings. Countries may, however, permit or tolerate such imports, since they make possible the purchase of certain types of commodities for which dollars would not normally be available. Furthermore, as noted above, the authorities may tolerate, or even stimulate, these import transactions, if they are anxious to reduce large bilateral credit balances.

From the point of view of the soft currency exporting country, these transactions involve "switch exports" to the dollar area against receipts in clearing currencies instead of dollars. In exceptional cases, the authorities may be inclined to permit or tolerate such switch exports, e.g., when the transactions result in exportation of commodities which are hard to sell at prevailing prices and at the official rate of exchange. However, exports to the dollar area against payment in clearing currencies often take place against the wishes of the authorities in the exporting country. Available information indicates that the authorities have often found it

[13] This, too, does not apply to "cheap" quotations of transferable sterling.

[14] The term "switch import" is used to indicate an import of dollar goods into a soft currency country against payment by the importer in a non-dollar currency, i.e., via the account of a bilateral payments agreement. Similarly, the term "switch export" denotes a transaction involving an export to the dollar area against receipt by the exporter of a clearing currency instead of dollars.

difficult to check these transactions. From the point of view of the trade and exchange control of the exporting country, the goods may be shipped to a country with which a bilateral agreement is in force; the shipping papers may indicate a port in the bilateral partner country as destination, payments being received via the clearing account with the partner country. After the goods have left the port in the exporting country, however, the original shipping papers may be revised, or replaced by new ones, to indicate a port in another country, e.g., the United States, as destination. The authorities in the exporting country may exercise some control by imposing an *ex post* check requiring a certificate of landing, of consumption, or of customs clearance to be sent from the bilateral partner country. This has been attempted particularly where important national exports, such as wool, coffee, or silk, were repeatedly switched to the United States. Even in such cases, *ex post* control may be difficult to implement, since, in order to be effective, it must be applied to many individual transactions, and since, in addition, falsification of documents is possible.

Transactions of the kind discussed here may be, but are not necessarily related to, an attempt to reduce outstanding agreement balances. In fact, as is indicated later, there appear to be many cases in which the transactions have the effect of increasing rather than reducing the agreement balance held by a net creditor country. When scarcity conditions prevail for certain dollar goods and importers in soft currency countries are willing to pay premium prices, or when U.S. exporters are trying hard to dispose of certain goods for which world market conditions are highly competitive, dollar exports may go to countries even when they are not in a net creditor position under the bilateral agreement via which the payment is made. Once clearing currencies are in the hands of a U.S. exporter, he will try to dispose of them by selling them to a U.S. importer. The U.S. importer is willing to acquire clearing currencies when the discount enables him to purchase soft currency goods at a price sufficiently competitive to make possible a sale in the U.S. market. Such cases may involve imports into the United States which would otherwise not have taken place, but the imports may actually be from countries that are already in a net creditor position under the relevant bilateral agreement.

## Nature of Markets for Clearing Currencies

Since about the middle of 1952, the clearing currencies of various bilateral agreements have from time to time been quoted at a discount in dollars in a number of international trading centers. The most active

market for the negotiation of clearing currencies has probably been New York. This may be explained by the fact that, as noted above, most triangular transactions in case 3 involve hard currency countries, of which the United States is the most important. Because of the contacts between traders and intermediaries engaging in triangular operations, the quotations for clearing currencies in New York frequently apply also to transactions organized elsewhere and sometimes carried out with hard currency countries other than the United States.

Each discount quotation in the market usually arises as a result of two commodity transactions, carried out in combination by one or more traders, between the two agreement countries concerned. For instance, a discount quotation in New York for the "Argentine-West German clearing dollar, payment to Argentina" results from the negotiation of a certain amount of these clearing dollars between a U.S. exporter who has received them in payment for goods shipped to West Germany and a U.S. importer who wants to purchase them at a discount as a means of payment for imports from Argentina. The two commodity transactions—in this case the import of goods from the United States into West Germany and the export of goods from Argentina to the United States—are usually carried out at approximately the same time, unless an exchange broker is willing to take the risk of holding the clearing dollars. Thus, before the clearing currencies are negotiated, two commodity transactions must be arranged and, usually, effective payment through the agreement must have been made.[15]

Although in most cases where clearing currencies are quoted at a discount the relevant negotiation takes place between traders in hard currency countries, traders in soft currency countries may sometimes be involved also; for example, when the resale to the United States of commodities originating in one partner country by traders in the other partner country is facilitated by special measures in the latter, such as a retention arrangement for the dollar proceeds from such transit sales, or a free market in which the clearing currency is negotiated at a discount. Instead of selling the commodities to the U.S. importers, the traders in the agreement country may dispose of their clearing currency balances by selling them at a discount to U.S. traders, who in turn use them to pay for commodity imports from the other partner country.

[15] A discount quotation is frequently given for a clearing currency with the connotation "bid wanted" or "offer wanted." In such cases, clearing balances have not yet been negotiated at the time the quotation is published, since either the import or the export transaction with the United States still has to be arranged. However, these quotations indicate the approximate discount at which traders are willing to purchase or sell the clearing currency against dollars.

## Factors Influencing Supply and Demand for Clearing Currencies Used in Trade with Hard Currency Countries

The supply of clearing currencies in the New York market, i.e., the amount of clearing balances received by or offered to U.S. exporters in payment for dollar goods, is dependent on a combination of factors, of which the general conditions favoring switch imports into non-dollar countries, and the willingness of U.S. exporters to accept such clearing balances in payment for their exports, seem to be the most important.

The effective demand for switch imports in soft currency countries is related, first, to the scarcity conditions for dollar goods prevailing in these countries, to the extent to which bilateral clearing currencies are available for making payments for such goods, and, finally, to the attitude of the authorities concerned toward switch imports. As previously stated, the authorities, when opening the door to switch imports, may be motivated either by monetary or by commercial considerations. If a country holds relatively large credit balances under some or several of its agreements, and at the same time maintains dollar restrictions, the authorities may be inclined to allow some of the holdings of clearing currencies to be used for switch imports of dollar goods, for which importers will be inclined to pay premium prices. The type of dollar import which a country can arrange on a switch basis is determined by its eagerness to divest itself of some of its bilateral claims (i.e., by the discount it is willing to accept for that purpose), and by the stringency of its restrictions on direct dollar imports. The latter factor will largely indicate what categories of dollar goods can be sold at prices whose premium corresponds with the discount at which its bilateral currency holdings can be disposed of.

When it allows switch imports, a country may, however, be looking primarily for commercial advantages, and a bilateral payments channel will then be used only as a means to that end. Under these conditions, a country may even offer to pay in a bilateral currency in which it already holds a short position, thus increasing its dollar imports at the risk of complicating, or perhaps compromising, the bilateral relationship concerned.

The willingness of U.S. exporters to accept clearing currencies in payment for dollar goods will, to an important extent, depend on their familiarity with this method of conducting business, and on their ability to dispose of the clearing balances which they obtain to U.S. importers or to middlemen. As previously explained, the transactions, although they may be profitable, cannot always be arranged promptly and smoothly. In general, the larger the discount at which clearing cur-

rencies are negotiated, the easier it is for the U.S. exporter to dispose of them, since a larger discount will enable the U.S. importer to purchase larger quantities or a greater variety of goods in the agreement countries concerned. However, even if the U.S. exporter has some difficulty in disposing of clearing balances, he may be willing to accept them when he has trouble selling abroad as a result of stringent dollar restrictions or of excess supply conditions in certain world commodity markets.

The demand for clearing currencies in the New York market arises from U.S. importers attempting to make purchases from bilateral agreement countries against payment in clearing currencies, and/or soft currency exporting countries being willing to approve or tolerate, or being unable to prevent, switch exports. When exports to the United States from the soft currency countries are overpriced, U.S. importers may be able to purchase such goods only when they receive some price concession, which may take the form of a discount against which they can purchase clearing balances to be used in import payments.

As a general rule, case 3 transactions appear to originate mainly in the bilateral importing country, either because that country has a strong demand for dollar goods, or because it wants to liquidate an excessive bilateral claim. The corresponding switch exports from the other bilateral country can, under those conditions, be arranged because the U.S. importer is being offered balances in cheap agreement currencies arising from the payment of switch imports into the country holding those balances. Although bilateral agreement countries usually oppose switch exports to the dollar area, these exports may be permitted or tolerated in order to promote the sale of overpriced exports, or, in exceptional cases, to help reduce excessive debtor balances, which the country concerned has not been able to pay off otherwise.

## Level of Discounts for Clearing Currencies

Some idea of the actual discounts at which clearing currencies are negotiated between traders in dollar countries[16] may be obtained from the quotations for various agreement currencies available in the New York market since about 1952. Clearing currencies of about 50 bilateral agreements have been quoted, some only occasionally but many others quite frequently.[17] Some general conclusions may be drawn from the

[16] Or between traders in a dollar country and a bilateral agreement country (see p. 186).

[17] Some sources give quotations for many more bilateral agreement currencies, but those selected for study in this paper appear to be the more important ones representing most of the triangular transactions involving trade and/or payments under bilateral agreements.

quotations available on or about June 1, 1953 and June 1, 1954; the results are presented in some detail in the Appendix.

As already noted, dealings in clearing currencies are closely tied to the underlying commodity transactions. The discount quotations available for various clearing currencies should therefore be interpreted with care. Each quotation may reflect the market conditions for one or only a few commodities involved in the trade transactions concerned. They may not be indicative of the general scarcity conditions for dollar goods in the domestic market of the soft currency importing country, or of the extent to which goods from the soft currency exporting country are generally overpriced. The discount quotations for an individual clearing currency may indeed change rapidly with the market conditions for one or more of the commodities involved, or as different commodities are involved in the trade transactions which underlie the negotiation of clearing currencies.

In general, the discount for a clearing currency reflects the import premium in the soft currency country, i.e., the premium which the importer pays in his own currency for the dollar goods involved. The discount can exceed the import premium only if the U.S. exporter lowers his normal dollar price and absorbs part of the higher cost to the soft currency importer, which is the result of payment in a clearing currency. On the other hand, the import premium may exceed the discount in the New York market when importers in the soft currency country are able to make profits which are not fully absorbed by the loss on the sale of the bilateral balances involved. The discounts for clearing currencies will tend to go down when the import premiums fall. When dollar commodities in the domestic market of the non-dollar importing country become less scarce, as a result of relaxation of dollar restrictions, or of large-scale switch imports in the past, or other factors, import premiums and discounts for clearing currencies used in payments for switch imports into the country concerned will tend to decrease.

These observations are borne out to some extent by the actual behavior of the discounts for a number of different clearing currencies in June 1953 and June 1954. At both times, the discounts for clearing currencies used in payment for switch imports into countries where dollar restrictions had ceased to be very severe were considerably lower than those for currencies used in payment for such imports into countries where stringent restrictions were maintained. For instance, while discounts for clearing currencies used in switch payments by Belgium, West Germany, and the Netherlands did not as a rule exceed 5 per cent in June 1953, those for switch imports into Austria, Brazil, France, Denmark, and Yugoslavia were 10 per cent or higher. Moreover, in June 1954 discounts for clearing currencies were generally below those

for June 1953, except that the discounts for clearing currencies involved in switch imports into Brazil and Sweden were still about 10 per cent, and those for Japan increased from 6 per cent to approximately 10 per cent. Average discounts relevant for switch imports into Belgium had fallen from 5 per cent to 2.5 per cent, and those for imports into West Germany, from 6.5 per cent to 4.5 per cent.

Where more than one clearing currency is used in payment for switch imports by traders in the same country, the discounts for the various currencies frequently show considerable differences. Such differences may, of course, have no other implication than that individual transactions involved various import commodities for which internal market conditions in the soft currency country were widely different. In June 1953, however, there were a number of countries whose traders were purchasing switch imports, both with clearing currencies in which the countries had a net creditor position and with currencies in which they had a net debtor position. For practically all these countries, namely, Austria, Brazil, Finland, France, and Japan, the discounts tended to be considerably higher for currencies in which the importing country had a net creditor position than for those in which it had a net debtor position.[18] These differences seem to indicate that switch imports against currencies of which the importing countries had a surplus involved commodities that were generally scarcer in their domestic markets than those imported against payment in currencies in which the countries had a debtor position. To some extent, this may reflect the attitude of the authorities in the countries concerned toward the use of clearing currencies in payment for imports from the United States and other hard currency countries. Where currencies in which the importing country had a net debtor position were used, the commodities involved tended to be those which were regarded as more essential and for which import premiums were lower than for luxury goods. On the other hand, where the importing countries had a net creditor position in certain currencies, the authorities concerned may have been more eager to dispose of their holdings; or, alternatively, if the bilateral debtor country was in over-all balance of payments difficulties, the authorities may have found that they could find a market for their holdings only if they agreed to accept a larger discount. As a consequence, a greater variety of commodities, including luxuries fetching relatively high premiums, tended to be imported in this manner.

[18] Five other countries whose traders appear to have purchased switch imports with more than one agreement currency were either in a net debtor or in a net creditor position under all of the agreements concerned. The same was true for nine out of twelve countries whose traders appear to have purchased switch imports in more than one agreement currency in June 1954.

The discount for a clearing currency must also reflect the extent to which commodities sold to the United States by the non-dollar exporting country concerned are overpriced. These discounts may, indeed, reflect high cost-price levels either in individual agreement countries' internal markets generally or in particular commodity sectors. Where an agreement country's export commodities tend to be overpriced, a U.S. importer purchasing them against payment in clearing currencies must be able to obtain these currencies at a sufficiently high discount to make possible switch exports from the agreement country. If the discount is too low (e.g., as a result of importers in the other partner country being willing to purchase at only relatively small discounts), there will be a tendency to shift to export commodities that are more competitively priced. If that cannot be done, the transactions become more difficult to arrange, and eventually disappear.[19]

If high-cost conditions are sufficiently widespread in a bilateral country, high internal prices may be expected to prevail for certain import goods, as well as for export goods. Thus, there are many individual cases in which the discounts for clearing currencies used in payment for switch exports and those relevant for switch imports (i.e., both for payments to be made to that country and for payments to be made by that country) are both relatively high. From the discount quotations for June 1954, it appears, for instance, that both switch exports from and switch imports into Brazil and Italy involved discounts of approximately 10 per cent. In most cases where discounts relevant for switch exports and imports of the same agreement country are available, they tend to be close together. In countries where cost-price conditions are generally not far out of line with those of hard currency countries, both types of discount tend to be low, e.g., in Belgium, where in June 1954 the clearing currencies involved in switch exports and imports were at a discount of approximately 2 per cent.

On the other hand, there are cases where the difference between the clearing currency discounts for switch imports and those for switch exports of the same country is relatively large. For instance, the discounts quoted in June 1953 showed such differences for Argentina, Italy, Spain,

[19] This seems to have occurred during 1954 as a result of the decline in the discounts quoted for a number of clearing currencies in New York. It is understood that some firms specializing in this type of trade attempt to continue operations under a lower discount by combining the import and export transactions which otherwise might have been carried out by two or more traders separately. Some savings are achieved in this manner, since in this case no clearing balances are negotiated between exchange brokers and traders and the trading firms concerned do not have to pay fees to brokers. In addition, in most individual cases these so-called package deals appear to involve volumes of commodities sufficiently large to make the transactions worth while even at a smaller disparity in prices (for the goods concerned) between the United States and soft currency countries.

and Uruguay. Large variations in internal market conditions for the commodities which happen to be involved in these transactions may be responsible for the differences. Differences may also arise if, while a country's export prices are generally competitive, severe restrictions are maintained on certain luxuries, which therefore fetch relatively high premiums. Moreover, when imports into one partner country can be switched at a relatively high discount, it is possible that the clearing currencies concerned can be obtained by U.S. importers for making payment to the other partner country at a discount which does not necessarily reflect the exporting country's cost level.

## Volume of Transactions and Their Effect on Bilateral Agreement Balances

Although accurate estimates are not possible, some general remarks may be made about the factors which tend to influence the total value and volume of commodity transactions involved in triangular operations. As indicated above, a decline in the discount at which a clearing currency is negotiated may make the underlying transactions more difficult to arrange. In turn, the development, on a large scale, of triangular operations involving the same bilateral agreement may bring about a fall in the discounts for the clearing currency concerned. Between 1952 and 1954, the discounts for several clearing currencies fell significantly, while the "market" for some of them tended to become less active. During that period, the underlying transactions may also have declined in total value, particularly where the credit balances held under the agreements concerned had been reduced. On the other hand, in some cases traders may have found it possible to continue the transactions, despite a decline in discounts, by organizing so-called package deals, not necessarily involving negotiation of clearing currencies (see footnote 19). The commodity transactions in these deals are essentially of the same nature as those for which clearing currencies are negotiated between traders in hard currency countries.

Despite a general downward tendency between June 1953 and June 1954, certain discount quotations remained relatively high, or even increased. This was particularly true for a number of bilateral agreement currencies of countries with relatively high domestic cost levels and/or intensive dollar restrictions. In these cases, some scope remained for the organization of switch imports and switch exports. It does not follow, however, that the clearing currencies of all bilateral agreements with high-cost countries are regularly involved in triangular operations. Those countries which have large bilateral debit balances in several pay-

ments agreements, and where internal market conditions are still relatively favorable to switch trade, do not represent a large part of the total demand and supply of commodities that may be transacted in triangular operations. For those clearing currencies that do become involved, it would seem, in fact, that periods of relatively intense market activity are frequently followed by periods in which few, if any, operations take place.

The commodity imports and exports involved in these triangular operations can be distinguished in the trade statistics of individual countries to only a very limited extent, if at all. For example, trade statistics do not specify imports (or exports) for which payments are made in clearing currencies. Only a few countries assemble statistical data on transit trade licensed by the authorities. But even where such data are available for transit trade in commodities originating in countries that are partner to bilateral agreements, they do not give an accurate picture of the scope of the triangular transactions under discussion here. These transactions are not necessarily part of transit trade, and from the point of view of individual countries they may appear as direct trade. Moreover, where transit trade in commodities purchased in agreement countries is recorded in a country's trade statistics, the transactions represented do not necessarily involve the negotiation of clearing currencies at a discount. Finally, transit trade transactions may be carried out without the knowledge of the authorities of the countries concerned. Thus, even in the trade statistics that are available, it is virtually impossible to distinguish between transit transactions which involve "cheap clearing currencies" and those which do not.

In view of these limitations, the statistical material that is available in a few cases has to be interpreted with care. Some illustrations may be given for West Germany, whose trade statistics classify imports according to both country of origin and country to which payments are made. Imports into West Germany of goods originating in dollar countries exceeded those for which payments were made to dollar countries by $156 million in 1952 and by $173 million in 1953. Most of these dollar commodities were probably purchased against payment in EPU currencies (including sterling) and involved no clearing currency of a strictly bilateral nature. However, some of these goods may have been imported against payments via one or more of West Germany's bilateral agreement accounts. This would seem to be supported by the fact that for five countries[20] with which West Germany has bilateral agreements imports originating in these countries and shipped into West Germany fell short of the commercial payments which West Germany made to

[20] In 1952 these countries were Brazil, Finland, Spain, Uruguay, and Yugoslavia. For 1953, Uruguay should be omitted.

them. In 1952 the difference was $26 million, or about 8 per cent of commercial payments to the agreement countries concerned; for 1953, it was $32 million, or about 11 per cent. This seems to indicate that West Germany made payments via the clearing accounts set up by the bilateral agreements with the countries concerned for significant amounts of goods not originating in the respective partner countries.[21]

### Effect on countries' bilateral agreement balances

In the absence of complete information about the volume and value of triangular operations, no accurate estimates can be made of the changes which they cause in the bilateral agreement positions of the countries involved. The discount quotations in New York indicate which bilateral partner makes payments through a particular bilateral agreement, and which partner is receiving them. For instance, the transactions underlying a discount quotation for Brazilian-Italian agreement dollars payable to Italy—involving exports from Italy to the United States and imports of dollar goods into Brazil—result in a credit in favor of Italy on the Brazilian-Italian clearing account. Because of the net agreement position at the time the transactions took place, the switch exports from Italy may either have decreased Italy's net bilateral debtor position under the agreement or increased its net creditor position. All that can be inferred from the discount quotation is the direction in which the agreement position moves as a result of the underlying transactions, the actual change being determined by the magnitude of the transactions.

In certain cases, there are simultaneous switch transactions in both directions. In the example given for the Brazilian-Italian agreement, this would be indicated by two quotations for the Brazilian-Italian agreement dollar, not necessarily equal—one for amounts payable to Italy and one for amounts payable to Brazil. Underlying the second quotation would be a transaction involving imports into Italy of dollar goods, financed with clearing currencies originating from payments for exports from Brazil to the United States. When there are two such quotations for one clearing currency, the net effect on the bilateral clearing position of each of the partner countries cannot be determined, unless the magnitudes of the transactions in opposite directions are known.

It may be remarked, incidentally, that the existence of simultaneous

[21] Because of leads and lags between trade and payments, these amounts do not necessarily equal the differences of $26 million in 1952 and $32 million in 1953, recorded above. These figures would represent a minimum when goods originating in the agreement countries concerned were also purchased via third countries. It should be noted that imports originating in Argentina exceeded commercial payments to Argentina by $22 million in 1952 and $21 million in 1953.

quotations, showing discounts for payments in opposite directions under the same bilateral payments agreement, tends to indicate a lack of cooperation, or even of agreement, between the two countries concerned. From a monetary point of view, it does not appear to make sense that one partner should be reducing an outstanding balance at the same time that the other is increasing it. From a commercial point of view, the combination of two cheap currency transactions in opposite directions produces the result that each partner both imports from and exports to the United States at soft currency prices. If this result were intentional, it might have been achieved in a simpler fashion, with each country carrying out its own business. The fact, however, that the more devious and complicated procedure of executing two cheap currency transactions is resorted to supports the thesis that, generally speaking, countries are actively interested only in the import part of these transactions, and that the export part is usually organized without the knowledge of the authorities concerned.

The discount quotations of various agreement currencies, in combination with the available information about the net position of the corresponding agreements at the time, suggest that the underlying cheap currency transactions, taken together, probably have been more or less evenly divided between those tending to reduce and those tending to increase existing net agreement positions. But in June 1953, the transactions taken together probably tended to reduce clearing positions, particularly since various countries at that time were trying to dispose of excess credit balances.

In June 1953, the currencies of some 49 bilateral payments agreements were known to be negotiated at a discount in New York. For 13 of these agreements, the discount quotations indicated transactions in both directions, so that they tended, at least in part, to offset each other insofar as their effects on the existing agreement positions were concerned. The quotations for the currencies of the 36 remaining agreements indicate that transactions carried out under 17 of them tended to reduce agreement positions, while those under 12 tended to increase them. For the remaining 7 agreements, the effect on the agreement positions resulting from the transactions cannot be determined, since no information is available as to which of the partner countries held the net debtor, and which the net creditor, position.

A similar examination for June 1954 of 35 agreement currencies listed at a discount in New York shows that 20 of them were used for transactions in opposite directions, and their effects on the agreement positions of the countries concerned tended to offset each other. Transactions under 7 of the remaining agreements tended to increase agreement positions, while transactions under 8 agreements tended to decrease them.

The effect of the transactions on existing bilateral agreement positions may be illustrated in somewhat greater detail by reference to individual countries. From the discount quotations in June 1953, it may, for instance, be concluded that the underlying transactions tended to have a balancing effect on the bilateral clearing position of Argentina. Switch exports from Argentina tended to reduce its net debtor position vis-à-vis Austria, Belgium, Denmark, Finland, the Netherlands, Norway, and Sweden. However, the currencies of the agreements with Brazil, France, West Germany, Italy, and Japan were used for both switch exports from and switch imports into Argentina. On the other hand, in June 1954, Argentina's net creditor position vis-à-vis Yugoslavia tended to be increased as a result of switch exports. Argentine traders paid for switch imports via the agreement accounts with Austria, Belgium, France, Italy, and Sweden, but the effect on Argentina's bilateral payments position was offset at least in part by switch exports from Argentina with payments via the accounts of the same agreements. However, Argentina's net debtor position vis-à-vis West Germany tended to be increased as a result of switch imports.

There appears to have been no general tendency in the effects which switch exports and switch imports had on the bilateral payments position of Brazil. The New York quotations in both June 1953 and June 1954 suggest that there were then 14 agreements in the currencies of which switch exports and/or switch imports took place. In June 1953, there were transactions in opposite directions (i.e., involving switch exports from and switch imports into Brazil) against payment via the agreements with Argentina, France, West Germany, Italy, and Sweden. The currencies of the other agreements were used only in payment for switch exports from Brazil, and their effect on Brazil's existing clearing balances did not tend to be offset by payments for switch imports into Brazil. Thus, switch exports tended to decrease Brazil's net debtor position vis-à-vis Belgium, Chile, Denmark, the Netherlands, and Spain, and to increase its net creditor position with Austria, Finland, Japan, and Yugoslavia. In June 1954, there were transactions in opposite directions under the agreements with Austria, France, West Germany, Japan, the Netherlands, Sweden, and Yugoslavia. However, switch exports tended to reduce Brazil's net debtor position vis-à-vis Spain, and switch imports tended to decrease its net creditor position vis-à-vis Belgium and Greece. On the other hand, payments for switch imports into Brazil, made via the agreements with Belgium, Finland, Italy, and Norway, had the effect of increasing Brazil's net debtor position vis-à-vis those countries.

Switch imports of goods into Yugoslavia are indicated by the discounts quoted in June 1953 for payments through Yugoslav agreements with Argentina, Brazil, France, Italy, and Turkey. The transactions

had the effect of increasing Yugoslavia's net debtor position vis-à-vis those countries. In June 1954, when 8 clearing currencies were listed for Yugoslavia, the effect of the underlying transactions on its bilateral agreement balances was more mixed. There were transactions in opposite directions in the currencies of agreements with Austria and Brazil. Yugoslavia's net debtor position with Argentina and the Netherlands tended, however, to be decreased by switch exports, while its net creditor position vis-à-vis Norway tended to be decreased as a result of switch imports. On the other hand, switch imports had the effect of increasing its net debtor position vis-à-vis Greece, Italy, and Turkey.

The discount quotations recorded for Finland in June 1953 indicate that switch transactions involved imports into Finland rather than switch exports from Finland. They had the effect of increasing its net debtor position vis-à-vis Brazil, France, and West Germany, and of decreasing the net creditor position existing at the time vis-à-vis Argentina. In June 1954, the discount quotations indicated that both switch imports and switch exports took place against payment in the currencies of the agreements with Belgium and France. However, Finland's net creditor position vis-à-vis Argentina was decreased by switch imports, while switch exports from Finland tended to reduce its net bilateral debtor position with West Germany. On the other hand, switch exports tended to increase its net creditor position with Brazil.

Since the middle of 1954, activity in the New York cheap currency markets has tapered off to a considerable extent. Transactions of the kind examined in this paper have become much less frequent than they were in 1953 and during the first part of 1954. As a consequence, it has become practically impossible to obtain quotations for 1955 which indicate any particular trend. A few traders continued to issue lists of quotations, but these seemed to show the levels of discount at which they would be inclined to solicit bids or offers, rather than transactions actually concluded.

Various causes cooperated to produce this decline of the cheap currency market. Fewer bilateral payments agreements were as manifestly out of balance as they had been previously and, on the whole, governments appeared less tolerant of these practices than before. The countries which used to import dollar commodities through the procedures described above had less interest in trade of this kind. In many cases, import restrictions against dollar goods had been relaxed or abandoned. In addition, import transactions financed in transferable sterling (which was traded in the second half of 1955 at less than 1 per cent discount) offered a less costly procedure for obtaining dollar goods against non-dollar payments. Since most cheap currency transactions originated in the countries importing the dollar goods involved, the declining interest on their part in this type of trade undoubtedly reduced the scope for

cheap currency deals. In particular, the organization of an "area of limited convertibility" by Brazil, and similar other arrangements, and the overhaul of the Argentine exchange system that was undertaken toward the end of 1955, contributed toward the decline of the cheap currency market.

By the end of 1955, little business in cheap currencies was being contracted. However, dealers occasionally still managed to conclude a transaction. It was felt that, if monetary conditions developed further toward normal, the cheap currency market was bound to disappear. However, its revival was possible if countries should once more find themselves in monetary difficulties.

# APPENDIX

## Observations on Discounts for Clearing Currencies Quoted in New York in June 1953 and June 1954

It has already been explained that there are usually two commodity transactions underlying each discount quotation of a clearing currency. Thus, in the case of a quotation for Argentine-West German clearing dollars (payment to Argentina), the underlying commodity transactions are (1) the export of Argentine commodities to the United States and (2) the export of U.S. commodities to West Germany. A 10 per cent discount for clearing dollars indicates that a U.S. exporter could sell a commodity costing US$90 for 100 clearing dollars received from West Germany. He could then sell these clearing dollars for US$90 to a U.S. importer. The U.S. importer would thus pay US$90 for an Argentine commodity costing 100 clearing dollars.[22] When an exchange broker is involved, the discount quotation usually refers to the middle rate; at the usual broker's fee of about 1 per cent, the U.S. exporter would receive US$89.50 for 100 clearing dollars, and the importer would pay US$90.50 instead of US$90.

The transactions underlying the available discount quotations in June 1953 involved switch imports from the United States (or other hard currency countries) into the following agreement countries: Argentina, Austria, Belgium, Brazil, Chile, Denmark, Finland, France, West Germany, Italy, Japan, the Netherlands, Norway, Spain, Sweden, Uruguay, and Yugoslavia. The same discount quotations seem to indicate that these switch imports were combined with switch exports to the United States (or other hard currency countries) from the following agreement countries: Argentina, Brazil, France, West Germany, Italy, Japan, the Netherlands, Spain, Sweden, Turkey, and Uruguay. Transactions underlying the discount quotations in June 1954 involved switch imports into the following bilateral agreement countries: Argentina, Austria, Belgium, Brazil, Finland, France, West Germany, Italy, the Netherlands, Spain, Sweden, Uruguay, and Yugoslavia; and switch exports to hard currency countries from Argentina, Austria, Belgium, Brazil, Finland, France, West Germany, Greece, Italy, Japan, the Netherlands, Norway, Sweden, Turkey, Uruguay, and Yugoslavia.

The discount quotations available for June 1953 and June 1954 have been studied (1) by comparing the discounts in June 1953, applicable to switch imports

[22] An export commodity that is sold for 100 clearing dollars to a bilateral partner country may sometimes be offered to a U.S. importer for a smaller amount, if payment is made in effective U.S. dollars. If that price were US$95, it would still be worth while for the U.S. importer in the hypothetical case under consideration to buy the commodity concerned against a "cheap" currency.

into individual agreement countries, with those in June 1954; (2) by comparing discounts relevant for switch exports from individual agreement countries with those for switch imports into the same countries; and (3) by comparing the discounts for currencies of agreements under which the importing country had a debtor position with those under which it was in a creditor position.

(1) The available data suggest that, for June 1953 and June 1954, there were traders in at least 14 agreement countries purchasing switch imports, payments being made via the accounts of two or more bilateral agreements. In general, the discounts quoted in June 1954 were lower than those in June 1953. In 1953, there were 11 soft currency countries where importers carried out transactions involving discounts of 10 per cent or higher; these countries were Austria, Brazil, Chile, Denmark, Finland, France, Italy, Spain, Sweden, Uruguay, and Yugoslavia. On the other hand, switch imports into Belgium, West Germany, and the Netherlands involved discounts for clearing currencies in terms of dollars of 6 per cent or lower. Between June 1953 and June 1954, all discounts relevant for switch imports into these 14 countries decreased, in most cases considerably, except that for switch imports into Brazil and Sweden average discounts remained approximately 10 per cent and for switch imports into Japan the discounts increased from 6 per cent to approximately 10 per cent. In June 1954, traders in Japan, Spain, and Sweden appear to have paid import premiums of 10 per cent or more for switch imports from the dollar area. Relatively low discounts were involved in payments for switch imports into Belgium (2.5 per cent), West Germany and the Netherlands (4.5 per cent), and Uruguay (2 per cent).

(2) The June 1953 data show that the discounts relevant for switch exports from, and those for switch imports into, individual agreement countries were close together in some cases, e.g., Brazil, France, West Germany, and Japan, but relatively far apart in others, e.g., Argentina, Italy, Spain, and Uruguay. The average discount quotation for transactions involving switch imports into Brazil was 10 per cent, and for transactions involving switch exports, 11 per cent. The corresponding percentages for other countries were Argentina, 9 and 16; France, 12 and 10; West Germany, 6½ and 6; Italy, 10 and 7; Japan, 6½ and 5; Spain, 20 and 7; and Uruguay, 14 and 5.

Similar comparisons on the basis of the June 1954 data could be made for Argentina, Austria, Belgium, Brazil, Finland, France, West Germany, Italy, Japan, the Netherlands, Sweden, and Uruguay. For each of these countries, except Japan, switch imports and switch exports appear to have involved discounts for clearing currencies which were close together, the average difference in most cases being less than one point. Switch exports from and switch imports into Brazil, Italy, and Sweden involved discounts for clearing currencies of approximately 10 per cent. On the other hand, discount quotations relevant for switch export and switch import transactions with traders in Belgium and in Uruguay were approximately 2 per cent, and with those in West Germany, approximately 4½ per cent.

(3) As noted above, the available discount quotations for June 1953 indicated that traders in 14 countries purchased switch imports against payment in one or more clearing currencies. Of these 14, there were 12 where payments for switch imports took place through two or more of their bilateral agreements. Five countries (Argentina, Belgium, the Netherlands, Sweden, and Yugoslavia) were consistently in either a net debtor or a net creditor position under all of the agreements through which payments for switch imports were made. However, payments for switch imports into Austria appear to have been made through both agreements under which Austria was in a net creditor position and agreements under which it was in a net debtor position. The same applies to payments for switch imports into Brazil, Finland, France, and Japan. In all of these cases, the discounts for currencies in which the importing country had a net creditor position tended to be considerably higher than those in which it had a net debtor position.

A similar comparison could not be made for June 1954, since most of the countries (9 out of 12) for which more than two quotations were available had either a net debtor or a net creditor position in all of the payments agreements through which payments for switch imports were then being made.

# U.S. Exports of Surplus Commodities

**Frederick C. Dirks***

RECENT INTENSIVE EFFORTS of the U.S. Government to increase exports of certain agricultural products have been prompted by a rapid growth of government loans on, and holdings of, these products. This investment has been due largely to a decline since 1952 in the dependence of the rest of the world on North American food supplies, while U.S. production, which had been expanded to meet overseas demand following World War II and the Korean war, has continued at high levels. Production has tended to be supported by rising technological productivity as well as by government price supports, and restrictions on planting and marketing have not been sufficient to hold back the surplus output.[1]

Efforts to increase consumption were focused, until 1954, mainly on domestic outlets, particularly school lunches and donations through charitable organizations. For foreign policy reasons, the U.S. Government had tended until then to refrain from competing aggressively in world markets to dispose of the full excess of current output over domestic consumption. Under surplus disposal legislation enacted in 1954, however, special efforts have been made to increase U.S. agricultural exports through intergovernmental agreements containing special terms of settlement. The largest portion—about 60 per cent—of such exports has been sold for local currencies, a major part of which has been loaned back to the importing governments for developmental projects. Actual shipments under the surplus disposal program rose from $160 million in the fiscal year ended June 1954 to about $690 million in fiscal 1955 and $1,320 million in fiscal 1956.

The significance of this sharp increase is qualified by two considerations. One is a shift in statistical classification: part of the increase reflects the inclusion under surplus disposal legislation since 1954 of some

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[1] This is not to minimize the interference of rigid price supports with progress toward a rational adjustment. The economics of their effect is well understood, but so far it has been difficult to gain political agreement on moving to another basis. (A well-rounded discussion of the underlying trends and their policy implications is provided by John D. Black, in "Agriculture in the Nation's Economy," *American Economic Review*, Vol. XLVI (March 1956), especially pp. 42–43.)

foreign aid and relief financing, which is conceptually different from the disposal aspect of the program. A second is that the competitive world position of particular U.S. agricultural products is not reflected in the surplus disposal data alone. At times, rising exports under the surplus disposal program have been accompanied by reduced U.S. exports outside the program; at other times, the latter have been promoted by a more competitive pricing policy. For goods in surplus supply, an important part of the current crop tends to flow through government hands before final marketing; and for such goods, the prices permitted by the Government on regular export sales are an important factor in determining the volume of exports outside the surplus disposal program. Thus the effective competition provided by U.S. agricultural products in world markets is neither measured nor limited by the intergovernmental agreements and special terms which implement surplus disposal legislation.

A more informing indication of government efforts to promote U.S. agricultural exports is the share of the United States in total world exports of various agricultural commodities. From this standpoint it is significant that the U.S. shares of world exports of butter, cheese, and milk have risen sharply during the past two years. On the other hand, the 1955 rise in the U.S. share of world wheat and tobacco exports was hardly more than a recovery to their 1953 positions, the U.S. share in world corn exports recovered somewhat less, and the U.S. shares of world cotton and rice exports have continued to decline. This trend for cotton has been checked temporarily by a program to export U.S. cotton at more competitive prices during the next crop year, 1956–57, and rice also appears to be currently taken in larger quantities under intergovernmental agreements; but it is too early to say how much of the previous declines will be recovered.

The shift in U.S. policy over the past two years—from a tendency to shield world markets by withholding current U.S. output to a policy of reducing existing U.S. stocks—has led other exporting countries to express concern over the consequences for their own exports and for world prices. In March 1955, at the Ninth Session of the CONTRACTING PARTIES to the General Agreement on Tariffs and Trade (GATT), a resolution was approved by all voting countries calling for prior consultation by countries planning to export agricultural surpluses, with a view to minimizing the displacement of ordinary commercial marketings of other countries. An amendment to the GATT Agreement relating to subsidies also was proposed, which would urge that countries using a government subsidy to encourage domestic production should not use the subsidy system in such a way as to result in acquiring more than an "equitable" share of the world market. U.S. acceptance of the principle involved was immediately signified, but formal adoption of this amendment awaits approval by other Contracting Parties.

The Food and Agriculture Organization, with its broad objective of improving human well-being by increasing and improving the distribution and utilization of agricultural products, has given considerable attention since 1953 to affirmative ways in which surplus commodities may contribute to raising investment, production, and living standards in the lower income countries. In multilateral discussions a set of principles for surplus disposal has been evolved and accepted by nearly all member countries, a consultative committee with very wide representation has been established in Washington for continuous exchange of views, and pilot field studies have explored the specific application of surplus commodities in certain countries. A committee of the Organization has also begun a series of studies on the international effects of national agricultural policies.

These activities of the UN agencies indicate that, in the broad international view, the surplus disposal problem has positive as well as negative aspects.

## Concept of Surplus Disposal and Its Limited Significance

In current press and other discussions, the term "surplus commodity disposal" appears to carry a number of different connotations which are seldom defined. In its broadest sense the term can logically describe the total exports of a country, since all commodity exports represent goods which are surplus to the country's actual domestic consumption.[2] Another concept of surplus (as applied to agriculture) is the amount of crops carried over from previous harvests; in this view any effort to reduce the size of the carry-over is to be regarded in a different light from sale of the current crop. The significance of this concept is not clear, however, since fluctuations in harvests and in domestic consumption, currency instability, and other phenomena can make it possible at some times to dispose of previous carry-overs without any pressure on market prices, while at other times such pressure might arise during the sale of considerably less than the current crop.

It is perhaps most practicable and meaningful to use the term "surplus disposal"—at least in countries where the government engages in economic activity only in response to specific authorizing legislation—to describe the transactions carried out under special conditions that are contained in an avowed surplus disposal law. In the following discussion of U.S. practices, the term will be applied only to such transactions.[3] This usage need not overlook the fact that some transactions outside the surplus disposal laws are patently motivated by considerations of sur-

[2] Though not necessarily surplus to the country's human needs.

[3] Moreover, although U.S. surplus disposal laws provide for domestic as well as foreign disposal, only the latter will be considered here.

plus disposal; but to designate them all by the same term would tend to obscure the special character of most of the transactions that occur under surplus disposal legislation.

In the United States at present there are two major "surplus disposal" laws, of which the older is a section in the Mutual Security Act.[4] As last revised in 1955, section 8 of this Act directs that

> for the fiscal year 1956 not less than $300,000,000 shall be used to finance the export and sale for foreign currencies of surplus agricultural commodities. . . . Foreign currency proceeds accruing from such sales shall be used for the purpose of this Act and with particular emphasis on the purposes of section 104 of the Agricultural Trade Development and Assistance Act of 1954 which are in harmony with the purposes of this Act.

A more varied program for surplus disposal is contained in the Agricultural Trade Development and Assistance Act of 1954 (usually referred to as Public Law 480), which became effective in July 1954. The policy objectives of this law are summarized in the preamble, as follows:

> to make maximum efficient use of surplus agricultural commodities in furtherance of the foreign policy of the United States, and to stimulate and facilitate the expansion of foreign trade in agricultural commodities produced in the United States by providing a means whereby surplus agricultural commodities in excess of the usual marketings of such commodities may be sold through private trade channels, and foreign currencies accepted in payment therefor. It is further the policy to use foreign currencies which accrue to the United States under this Act to expand international trade, to encourage economic development, to purchase strategic materials, to pay United States obligations abroad, to promote collective strength, and to foster in other ways the foreign policy of the United States.

In their operation, most of the transactions under these two laws are distinguishable from other (mainly ordinary commercial) transactions by the prior negotiation of bilateral intergovernmental agreements providing special terms of settlement, such as the acceptance of currencies other than dollars or gold (with an understanding that such currencies will not be converted into foreign exchange), or the outright grant of the commodities for economic development or famine relief purposes. In addition to these terms, Public Law 480 authorizes the "barter or exchange of such agricultural commodities for strategic materials entailing less risk of loss through deterioration or substantially less storage charges." This last category differs from those previously mentioned in not involving any intergovernmental agreement; instead, the U.S. Government arranges its barter (in reality, matched sales) merely with U.S. private business firms, the latter being left free to find their own foreign markets and to negotiate their own terms. In such

[4] In addition to the two laws described in the text, minor export operations (estimated at $5 million in fiscal 1956) are carried out under an Act of August 24, 1935, which provided for the use of customs receipts for the removal of surplus commodities. Most of the operations under that law relate to domestic disposal.

transactions, moreover, the country of destination for the U.S. export may be different from the country of origin of the "bartered" import.

In these various types of transaction under the surplus disposal laws, there are at least two groups which—in the international view—merit separate consideration from the others. One is barter which, as explained, may take a form that is indistinguishable from ordinary commercial transactions; the other is emergency relief grants and donations. In earlier years (for example, in 1951 when agricultural export prices were high, U.S. commercial exports were large, and stocks presented no problem), there were also large grants and loans for emergency agricultural aid. That aid was patently not motivated by considerations of surplus disposal, and from this it can be presumed that its continuance at the present time is also largely independent of surplus considerations.[5]

On the other hand, there is a considerable group of transactions outside the surplus disposal laws which can well be regarded as stimulated by the de facto existence of surplus commodity stocks. These are the commercial sales for dollars, not involving any intergovernmental agreement, but accompanied by a special announcement that the U.S. Government intends to reduce its surplus stocks. An example of this was the sale of one million bales of government-held cotton in January and February 1956. This sale was made by a government agency to private business firms for dollars on condition that these firms would then export the cotton to buyers of their own finding. The terms on which the private exporters resold in foreign markets also were left to their discretion. From the international standpoint, this sale was thus distinguishable from other commercial exports only by the expression of motive.[6]

[5] Barter transactions and relief donations also differ from sale for foreign currencies in that there is less likelihood that they impinge upon the usual marketings of other exporting countries. This is because the recipient country *may* offset barter and relief imports by reducing the amounts that it would otherwise have imported from the United States for dollar exchange. (This possibility exists also for surplus commodity sales for non-dollar currencies under the Mutual Security Act, since the recipient country is not required by this Act to give assurance that its special purchase is in addition to its usual purchases from the United States.)

[6] It may be thought at this point that there can be no "ordinary commercial exports" of a commodity whose domestic price is so high that, if any of it is to be exported, it must be by benefit of a government subsidy. It is not clear, however, whether the U.S. subsidy for export is comparable to a conventional subsidy which (in other countries) may signify an export price that is below cost of production. Since productivity per man-hour in U.S. agriculture has risen more rapidly over the past 20 years than productivity in industry, it is not unlikely that U.S. agricultural exports could compete equally effectively in world markets if domestic market prices were set free.

The fact is that the particular use of domestic price supports to increase farm income in the United States tends to distort the comparative price advantages for agricultural against industrial products, and the export subsidy thus represents an offset (admittedly in uncertain degree) to that distortion. It is because the export price cannot be said to differ determinately from U.S. production costs that the bulk of exports outside the surplus disposal program are here regarded as "ordinary commercial exports."

It is to be noted, further, that ordinary commercial exports of products from a current harvest may compete with (or displace) the commercial exports of other countries just as effectively as the specially motivated commercial sales from (old) U.S. stocks,or shipments arranged by intergovernmental agreement under the surplus disposal laws. In each of these three broad categories, the significant question for other countries evidently must be not the expression of motive or the form of the transaction, but the aggressiveness with which the commodities are offered in foreign markets. It would be unrealistic to assume that aggressiveness can characterize only one form of export.[7]

The significance of these observations would seem to be this: What is really involved in the concern of other exporting countries over U.S. agricultural export competition is not merely an identifiable set of "surplus disposal transactions," but the over-all magnitude of U.S. commodity exports and their accompanying sales policy. Statistics on exports under the surplus disposal laws will not provide much perspective on these characteristics, or on their general impact on world markets. An informative evaluation would need to approach the problem instead by studying the changes that have occurred in the total amounts exported from year to year, the shifts in market destinations, and the structural shifts in major producing areas. A few statistics along this line, together with a comment on the difficulties of interpreting them, are submitted later in this paper.

## Magnitude of the Surplus Disposal Program[8]

The preceding discussion has indicated the scope of the surplus disposal legislation, which also limits the significance of the statistics covering it. To clarify the relation of surplus disposal to the foreign aid program, it may be added that a few, but not all, of the commodity shipments under foreign aid also come under the "surplus disposal" clauses. Not included in the latter category are commodity exports financed by the Export-Import Bank of Washington, some of those financed under the

[7] These remarks are not intended to imply that intergovernmental agreements and special terms necessarily reflect aggressive selling, but only that all three types of transaction have a common potential for aggressive competition. Moreover, the actual degree of competitiveness in these transactions can, and apparently does, shift from time to time. Nor should it be inferred that the United States has been unique in guaranteeing minimum prices for agricultural products or in employing bilateral trade agreements. Many, if not most, other countries engage in such practices.

[8] While $1.4 billion of surplus commodities were exported in the period July 1953–December 1955, special domestic disposal programs absorbed another $1.3 billion of government stocks. Other measures to deal with the surplus problem domestically include flexible support prices, reductions in seeded acreage, and marketing quotas. These domestic measures will not be discussed here.

TABLE 1. U. S. FARM EXPORTS UNDER SURPLUS DISPOSAL PROGRAMS[1]

*(In millions of U. S. dollars)*

| Terms of Settlement | Fiscal Year | | Jul-Dec 1955 | Jan-Jun 1956 |
|---|---|---|---|---|
| | 1953–54 | 1954–55 | | |
| For local (foreign) currencies | | | | |
| Public Law 480 (Title I) | — | 72 | 200 | 225 |
| Mutual Security Act | 116 | 280 | 111 | 254 |
| Barter[2] | 34 | 125 | 158 | 107 |
| Donations[3] | 12 | 128 | 70 | 105 |
| Famine relief[4] | — | 83 | 38 | 52 |
| Total | 162 | 688 | 577 | 743 |

Sources: U. S. Department of Agriculture, *The Demand and Price Situation* (Washington, November 18, 1955) and *Foreign Agricultural Trade Digest* (Washington, July 1956); Semiannual Reports of the President to the Congress on Activities under Public Law 480 (Washington).

[1] Export values, except donations and famine relief which are at cost to Commodity Credit Corporation.

[2] The barter relationship usually does not apply internationally; as a consequence, settlement is usually for dollars. See page 203.

[3] Made through private charitable organizations; intergovernmental agreement not involved.

[4] Involves intergovernmental agreement, but the "surplus disposal" motive may be absent (see discussion p. 204).

Mutual Security Act, and various earlier shipments under ad hoc relief legislation. On the other hand, the disposal program includes some commodity shipments which are not considered as foreign aid; this applies to the sales for local currencies (although subsequent grants and loans from these currencies are considered aid) and the so-called barter program.

During the past two years, the volume of exports under the disposal program has risen rapidly (Table 1). For the next fiscal year (1956–57), such exports will be expanded further by a new cotton program, announced in March 1956, for offering at "competitive world prices" up to five million bales of government-held cotton. This offering is similar to the sale of one million bales in January and February 1956 in its emphasis on competitive prices; but whereas the one million sale was for dollar exchange only (and outside the surplus disposal legislation), the new offering is available either for dollar exchange or for other currencies under Public Law 480. It apparently was market anticipation of some such offering which led to a decline in world cotton prices and a virtual cessation of U.S. exports in the last months of 1955.[9]

[9] However, it should be noted that the sharp fall in U.S. cotton exports earlier in 1955 was probably more a reflection of uncompetitively high U.S. prices. Also, the U.S. price competition in January and February 1956 was not so keen as to prevent some recovery in world prices during the sale.

SALES FOR LOCAL CURRENCIES

Sales for local currencies, which are generally made at prevailing U.S. export prices, so far have comprised the major part of the disposal program. Such sales resemble grant-aid shipments in that both generate local currencies, the disposition of which involves an agreement between the United States and the importing country; also, in both cases some of the local currency proceeds are earmarked for U.S. use.

The programs differ, however, as to the ownership of the local currency and its ultimate disposition. Under grant shipments the bulk of the deposited local currency (counterpart funds) belongs to the aided country and is spent by it, and there is no repayment obligation to the United States. In contrast, local currencies deposited in payment for U.S. surplus commodities belong entirely to the U.S. Government; they are available for a variety of purposes, including offshore procurement of military items, purchase of materials for U.S. stockpiling, and assistance to foreign economic development programs. In the last connection, the local currencies are predominantly loaned back to the purchasing country and must be repaid with interest. The standard terms for these loans call for interest at 3 per cent if repayment is made in dollars, or 4 per cent if in local currencies. Principal is to be repaid in periods up to 40 years. (Actual repayment periods so far agreed to have varied between 9 and 40 years.)

The general uses of currencies acquired through surplus commodity sales are specified at the time the sales are agreed. For sales under Public Law 480, nearly half of the amounts involved so far have been loans for multilateral trade and economic development (Table 2). Most of the remainder has been for U.S. purposes, including the unspecified residual (although some of this residual may later be allotted for foreign economic development). Illustrative of the agreements specifying the objects of the loans are one with Japan involving $60 million for power facilities, irrigation, and reclamation, one with Peru for $2 million for irrigation, and one with Israel for $5 million for irrigation and power facilities.

One of the smaller uses of local currency indicated in Table 2, but one which has recently been growing, is the purchase of goods for other countries. In a typical arrangement of this sort, a U.S. agricultural product is sold to an industrial country for payment in its local currency; this currency is then loaned or donated to a third country to pay for products which it buys in the second country. In a formal sense, such a transaction involves aid only to the third country which needs manufactured goods; the second country enters the picture only as an intermediary which enables the United States to forego its opportunity to provide the manufactured goods by substituting an export of agricul-

TABLE 2. PLANNED USES OF LOCAL CURRENCY PROCEEDS UNDER AGREEMENTS BETWEEN UNITED STATES AND OTHER GOVERNMENTS SIGNED JULY 1954–JUNE 1956[1]

*(Export value, in millions of U. S. dollars)*

| | Amount | Per Cent of Total |
|---|---|---|
| Multilateral trade and economic development: loans | 509 | 49 |
| grants | 7 | 1 |
| Military procurement (common defense) | 166 | 16 |
| Purchase of goods for other countries | 22 | 2 |
| Agricultural market development | 20 | 2 |
| International educational exchange | 11 | 1 |
| Purchase of strategic materials | 7 | 1 |
| Unspecified | 300 | 29 |
| | 1,042 | 100 |

Sources: Semiannual Reports of the President to the Congress on Activities under Public Law 480 (Washington).

[1] The data refer to prospective sales under agreements concluded during the period indicated. They include, however, only sales under Public Law 480; similar information on sales under the Mutual Security Act has not been published.

TABLE 3. REGIONAL PATTERN OF U. S. COMMODITY EXPORTS FOR LOCAL CURRENCIES, JULY 1954–JUNE 1956[1]

*(Export value, in millions of U. S. dollars)*

| | Jul-Dec 1954 | Jan-Jul 1955 | Jul-Dec 1955 | Jan-Jun 1956 |
|---|---|---|---|---|
| Europe | — | 164 | 35 | 200 |
| Middle East | 29 | 13 | 23 | 53 |
| Far East | — | 131 | — | 245 |
| Latin America | — | 24 | 85 | 40 |

[1] See notes to Table 2.

tural products. Actually, the triangular transaction may also assist the second country to increase its total imports (by the amount of the increase in its exports), in that the use of its local currency to pay for the U.S. commodity constitutes a conservation of its foreign exchange which can then be used for other imports, either from the United States or from other countries.[10]

Over the entire period through June 1956, three fourths of the sales for local currencies under Public Law 480 were to countries in Europe and the Far East (Table 3). In Europe the greater part of the sales were

[10] In a minor variant of this arrangement, the U.S. agricultural commodity has been exported to the aided (third) country, which then re-exports it to the (second) country where it wishes to establish a credit.

to Yugoslavia ($123 million), Spain ($118 million), and Italy ($50 million), with seven other countries taking smaller amounts. In the Far East most of the sales were to Japan ($151 million), Indonesia ($97 million), Korea ($59 million), and Pakistan ($46 million). Local currency sales to the Middle East tended to increase; those to Turkey and Israel amounted to more than $40 million each; and those to Egypt and Iran were of smaller amounts. Sales to Latin American countries varied over the period, the largest being made to Brazil ($42 million), Chile ($40 million), and Argentina ($31 million), and the remainder of the total to that area being divided among four other countries.

## World Exports and the U.S. Share

For some commodities, such as wheat and cotton, increased U.S. exports under the surplus disposal program have been more or less offset by declines in exports outside the program. For other commodities, such as butter, transactions under the surplus disposal laws have not been large, but exports have risen because of more aggressive U.S. selling for dollar exchange through ordinary commercial channels. Because of these developments, the aggressiveness of U.S. export policy is measured less appropriately by statistics of surplus disposal exports as such than by the over-all exports of the particular U.S. products.

The illustrative data for eight commodities provided in Table 4 show that the greatest percentage advances in U.S. exports have occurred in dairy products, a relatively minor sector of the surplus disposal program.[11] U.S. butter exports rose from about one half of 1 per cent of total world butter exports in the late 1920's, and a similar percentage in the years 1948–52, to 2.4 per cent in 1955. Cheese exports, which probably accounted also for one half of 1 per cent of total world cheese exports in the late 1920's and only a little more than this in 1953–54, rose to nearly 3 per cent in 1955.[12] It is to be noted, however, that such small initial export shares are inherently susceptible of much faster relative increases than would be possible for commodities which initially accounted for a larger share of the market. Thus U.S. milk exports, which accounted for perhaps 9 per cent of total world milk exports in the 1920's and for a postwar low of 20 per cent in 1953, rose to 28 per cent by 1955 —a relatively small rise, but probably more significant from the standpoint of other competing export countries. The rise in milk exports

[11] Among the $504 million of intergovernmental agreements signed through December 1955 to export agricultural products for payment in foreign currencies, dairy products accounted for only $8 million, or 1.6 per cent.

[12] The much higher exports in the period 1948-52 were largely for foreign aid.

TABLE 4. U.S. AND WORLD EXPORTS OF SELECTED COMMODITIES

| | World | United States | United States as Per Cent of World | World | United States | United States as Per Cent of World |
|---|---|---|---|---|---|---|
| | Wheat and Wheat Flour (*million bushels*) | | | Cotton (*million bales*) | | |
| Calendar years | | | | | | |
| 1924–28 av. | 874 | 189 | 22 | 15.00 | 8.67 | 58 |
| 1929–33 av. | 815 | 107 | 13 | 14.15 | 8.09 | 57 |
| 1934–38 av. | 636 | 46 | 7 | 13.54 | 5.71 | 42 |
| Crop years[1] | | | | | | |
| 1948–50 av. | 917 | 430 | 47 | 11.77 | 5.48 | 47 |
| 1951–52 av. | 1,002 | 420 | 42 | 12.03 | 5.00 | 42 |
| 1953 | 987 | 318 | 32 | 11.75 | 3.18 | 27 |
| 1954 | 879 | 217 | 25 | 13.06 | 3.91 | 30 |
| 1955 | 952 | 275 | 29 | 12.22 | 3.58 | 29 |
| 1956 | 1,010 | 340 | 34 | 11.90 | 2.10 | 18 |
| | Rice (*million metric tons*) | | | Butter (*thousand metric tons*) | | |
| Calendar years | | | | | | |
| 1924–28 av. | 7.42 | 0.19 | 3 | 459 | 2 | 0.5 |
| 1929–33 av. | 7.19 | 0.25 | 3 | 567 | 1 | 0.2 |
| 1934–38 av. | 9.65 | 0.07 | 1 | 556 | 1 | 0.1 |
| 1948–50 av. | 4.05 | 0.47 | 12 | 433 | 2 | 0.5 |
| 1951–52 av. | 5.08 | 0.64 | 13 | 420 | 2 | 0.4 |
| 1953 | 4.20 | 0.70 | 17 | 430 | 0 | 0.0 |
| 1954 | 4.40 | 0.56 | 13 | 425 | 2 | 0.4 |
| 1955 | 5.14 | 0.52 | 10 | 420 | 10 | 2.4 |
| | Cheese (*thousand metric tons*) | | | Milk (*thousand metric tons*) | | |
| Calendar years | | | | | | |
| 1924–28 av. | ... | 2 | 0.6[2] | ... | 29 | 9[2] |
| 1934–38 av. | 279 | 1 | 0.2 | 300 | 18 | 6 |
| 1948–50 av. | 313 | 37 | 11.8 | 610 | 269 | 44 |
| 1951–52 av. | 350 | 19 | 5.4 | 640 | 142 | 22 |
| 1953 | 360 | 3 | 0.8 | 630 | 126 | 20 |
| 1954 | 360 | 3 | 0.7 | 615 | 150 | 24 |
| 1955 | 361 | 10 | 2.9 | 703 | 200 | 28 |
| | Corn (*million bushels*) | | | Tobacco (*million pounds*) | | |
| Calendar years | | | | | | |
| 1924–26 av. | 337 | 19 | 6 | 1,401 | 528 | 38 |
| 1929–33 av. | 374 | 29 | 8 | 1,241 | 482 | 39 |
| 1934–38 av. | 402 | 31 | 8 | 1,191 | 437 | 37 |
| 1948–50 av. | 201 | 85 | 42 | 1,191 | 468 | 39 |
| 1951–52 av. | 179 | 100 | 56 | 1,279 | 459 | 36 |
| 1953 | 202 | 131 | 65 | 1,323 | 520 | 39 |
| 1954 | 213 | 76 | 36 | 1,290 | 454 | 35 |
| 1955 | 209 | 108 | 52 | 1,393 | 540 | 39 |

Sources: International Institute of Agriculture, *World Trade in Agricultural Products* (Rome, 1940); Food and Agriculture Organization of the United Nations, *Yearbook of Food and Agriculture Statistics*, 1951 and later years; U. S. Department of Agriculture, various bulletins.

[1] Twelve months ended June for wheat; 12 months ended July for cotton.

[2] Rough estimate based on assumption that world exports in 1924–28 were a little larger than in 1934–38.

resulted from increased donations through charitable organizations (including the United Nations Children's Fund) as well as through larger disposal sales for local currencies. Butter exports, as mentioned above, increased almost solely as a result of increased offerings at competitive prices for dollar exchange.

Except for wheat, exports of the major commodities which have been emphasized under the surplus disposal program have shown comparatively little increase in the export statistics so far. Wheat and wheat flour rose from a low point of 25 per cent of world exports in the crop year ended June 1954 to about 29 per cent in 1955 and 34 per cent in 1956. This is still well below the earlier postwar years, although it is higher than the level that obtained in the late 1920's.[13] The U.S. share of world rice exports similarly remains above the level of the 1920's, but its tendency in the past two years has been downward. The U.S. share of world cotton exports declined sharply in the crop year ended July 1953, and again in 1956, to a level that is very much lower than that in the 1920's. For rice and cotton it appears that the more recent fall in U.S. exports reflected a government policy of not offering these commodities at competitive prices during 1955. The current (1956) policy appears to be somewhat more aggressive, but it is too early to judge how lasting its effect may be on the U.S. share of the world market.[14]

U.S. exports of corn and tobacco recovered in 1955 from their decline of the previous year. The major factor in the higher corn exports was reported to be a short crop in Argentina.[15] The recovery of tobacco exports appears to have been aided by the sale of 40 million pounds for local currencies under Public Law 480; even with this assistance, however, the U.S. share of world tobacco exports has not risen above its stable long-term level.

It is difficult to evaluate the meaning of these statistics in terms of distortion in the world trade pattern for these commodities. There are few (if any) sectors of world trade where the origin and destination of various goods and services remain fixed for years at a time, and it would be debatable whether the actual changes in U.S. exports in these commodities have been any more dynamic than changes in its exports of many other goods and services, or than the exports of other countries. Even in butter and cheese, where the percentage increase in U.S. exports

[13] Wheat exports of the 1930's were subnormal, first because of the currency devaluations of competing countries in 1931–32, and later because of short U.S. harvests. With the return to a more normal harvest in 1937, the U.S. share of world wheat exports recovered the next year to 19 per cent.

[14] On the basis of tentative information at the end of July 1956 on cotton production, consumption, and stock requirements in noncommunist countries, the U.S. Department of Agriculture estimated that U.S. cotton exports during 1956–57 would be at least double the 2.1 million bales estimated for 1955–56.

[15] The sharp rise in the U.S. share of world corn exports between the 1930's and the early postwar period reflected partly an increase in U.S. exports, and partly a 70 per cent fall in the rest-of-the-world total. Most of the latter was accounted for by Argentine exports, which fell from 257 million bushels in 1934–38 to 58 million bushels in 1948–50. Corn exports from several East European countries also decreased over this period.

has been most striking, the obverse side of the percentage is that the share of the rest of the world has been reduced only from 99 to 97 per cent—a relatively negligible shift. In milk, the relative impact for the rest of the world is greater—a reduction in its share from about 78 per cent during 1952–54 to 72 per cent in 1955; but for the major commodities—wheat, cotton, and rice—there has been no appreciable reduction over the past two years in the aggregate share of other exporting countries in world markets, even if the figures are carried through June 1956.

Looking beyond these recent changes, the question may well be asked whether there are any long-term structural changes in the pattern of world production and trade which should be taking place, and which might be expected to entail a gradual decline in U.S. exports of crude commodities. The statistics cited here do not throw much light on this question, since production and trade have been disturbed by abnormal events for the past two decades. If the more normal period of the 1920's were not so long past, it might be considered significant that the current U.S. shares in world exports of wheat, corn, rice, and dairy products are all appreciably above that earlier period. Before this fact could be accepted as significant, however, many other questions would have to be answered regarding changes in comparative costs and consumption requirements in the major producing and consuming areas.

## FAO, GATT, and Other UN Discussions

The U.S. Government program to reduce its holdings of surplus agricultural commodities by sale in foreign markets under special terms has led the governments of competing exporting countries to fear that their own normal marketings would be displaced, thereby seriously impairing their foreign exchange earnings. These fears have been expressed both in the world press and in the various international agencies which provide an opportunity for multilateral exchange of views on this subject, especially the Food and Agricultural Organization (FAO) and the General Agreement on Trade and Tariffs (GATT). Such expressions refer most often to potential market displacement, since actual displacement appears so far to have been relatively small.[16] In addition, concern has

[16] The FAO *Monthly Bulletin of Agricultural Economics and Statistics* reported in December 1955 that "cautious policies of surplus disposal have so far avoided any major disorganization of world markets." In February 1956 at the Twelfth Session of the UN Economic Commission for Asia and the Far East, the Commission concluded that "It was clear [also] that the concern expressed by some countries earlier regarding the possible adverse effect of agricultural disposal policies had been happily alleviated by the cooperative manner in which these policies were being executed." In part, the U.S. procedure has probably reflected a recognition that major displacement of foreign exports and weakening of international

been expressed over the weakness of international prices which can develop when it appears that the United States may undertake to reduce its large commodity stocks.

The negative aspect of the surplus commodity problem—the potentially distorting effects of surplus transactions—has received attention in both FAO and GATT sessions. The FAO appears, however, to have given relatively more thought to the affirmative aspect of the problem —that is, to the potential contribution that commodities which are surplus to the consumption requirements of high income countries can make toward raising living standards in the lower income countries. The latter are a logical destination for such surplus commodities, not only because of their need but also because of the economics of market demand—that is, the tendency for incremental income in such countries to be spent largely on basic food and textile needs. (In the higher income countries there is typically little elasticity of demand for food and textiles with respect either to income or to price changes.) In such cases, however, there is a problem of planning so that the increased consumption of agricultural commodities is accompanied by new employment, preferably in productive projects that will permanently increase the country's output and its ability to sustain higher living standards.

## FAO DISCUSSIONS

The growing accumulation of agricultural products in some areas was discussed in the FAO Conference as early as 1953. Early in 1954 a working party was set up to consider suitable methods of surplus disposal, and it considered the possibility of special terms for such disposal to aid economic development, welfare, and relief.[17] Out of the discussions of the Committee on Commodity Problems and of the Seventh Con-

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prices would be politically undesirable as well as economically costly. These considerations apply of course to all U.S. agricultural exports, including those outside the surplus disposal law.

In regard to U.S. rice, an FAO report in October 1955 noted that "The U.S. Government, however, in order not to disrupt world markets unduly, has not [during 1955] offered for export sale rice from government stocks at prices lower than the equivalent of support prices paid to farmers" (Report of the Third Special Meeting on the Economic Aspects of the Rice Industry, CCP 55/27). In this connection it was noted that during 1955 the Far Eastern countries on the whole (principally Burma and Thailand) expanded their rice shipments, as did Egypt and Brazil, while the United States and Italy alone continued to reduce their exports notwithstanding that the stocks available in these two countries would have enabled larger exports to be made. (The significance of these developments is perhaps qualified by the fact that the increased marketings of Burma and Thailand, which included disposal of large carry-over stocks as well as most of their new crop, were made possible by their finding new markets in communist countries.)

[17] FAO has suggested also the establishment of national food reserves in countries living near the subsistence margin.

ference emerged a set of Principles of Surplus Disposal Recommended by FAO, which has been formally accepted by 36 member governments. In Section I are three general principles which advocate:

(1) The solution to problems of agricultural surplus disposal "through efforts to increase consumption rather than through measures to restrict supplies" [18]
(2) The avoidance by disposing governments of "undue pressure resulting in sharp falls of prices on world markets"
(3) An undertaking by both importing and exporting countries that surplus disposal under special terms will be made "without harmful interference with normal patterns of production and international trade." [19]

In Section II are more specific principles that would apply to "sales on concessional terms" and to "sales of government-held stocks in exceptional volume." These list a number of "common sense criteria" that should be taken into account in gauging whether such sales cause harmful interference with production and trade, and in weighing such harm against the advantages to countries benefiting from these special disposal measures. For sales in exceptional volume or at an exceptionally rapid rate, the principles urged prior consultation among governments interested in the possible effects.[20]

After working out these principles, the Committee on Commodity Problems considered various ways to apply them in practice. One approach was to set up field missions to make pilot studies. The first such study explored the possible utilization of dairy surpluses in Egypt, and a second the utilization of surplus supplies of all types in India, as an example of methods that could be used in other countries. The latter study pointed out the opportunity for underdeveloped countries to undertake investment projects of a social nature (e.g., road construction, irrigation, soil conservation) if they can obtain low-cost food and clothing to absorb the increased money income which such projects would provide. The study concluded that some 30 to 50 per cent of the cost of additional development projects could be financed through agricultural surpluses; in addition, some types of project were mentioned

[18] Nevertheless, in a list of "basic means of dealing with the problem of surpluses," the Committee on Commodity Problems included "the discouragement of uneconomic production" (C55/22, Appendix B, Guiding Lines for Dealing with Agricultural Surpluses).

[19] The reference to special terms would cover what were described earlier in the present paper as surplus disposal transactions in the formal sense, while principle (2) would apply also to what were described as ordinary commercial transactions.

[20] Observance of these FAO principles was further recommended to the American States by a Resolution of the Inter-American Economic and Social Council in December 1954 (ES-Res. 37/54).

where as much as 75 per cent of the total cost could be covered through foreign surpluses. It was noted that the study was planned so that "consumption within the country would increase to the full amount of the surpluses provided to assist in the financing of economic development, so that no burden would be created either on domestic markets or on international markets." At the Eighth Session of the FAO Conference in September 1955, the FAO Council concurred that the use of surpluses to aid economic development was "a highly promising approach," and urged its consideration by governments and interested international organizations.

In addition, FAO has tried to widen the opportunities for intergovernment consultation on surplus disposal by establishing in June 1954 a consultative subcommittee to sit in Washington on a continuous basis. At the end of 1955, 21 countries were members and 36 others were observers.

Having some bearing upon the question of surplus disposal, but extending beyond it, studies have also been started in the FAO on the international effects of national agricultural policies. These studies are aimed at facilitating adjustment of inconsistencies between such policies. One study on grains has been completed and a second on livestock is in process.

### GATT DISCUSSIONS

At the Ninth Session of the CONTRACTING PARTIES to the GATT, discussion of the negative aspects of surplus disposal led to a Resolution on the Disposal of Surpluses, which was approved on March 4, 1955 by all 32 voting countries, including the United States. This Resolution considered that "when arranging the disposal of surplus agricultural products in world trade" the countries involved should consult with other suppliers of those products (and with any other interested countries), with a view to keeping the liquidation orderly and, "where practicable," to expanding aggregate consumption of the product. The intent of this consultation was further clarified in the preamble which indicated that "export of such surpluses without adequate regard to the effect on the *normal* commercial trade of other Contracting Parties could cause serious damage to their interests by restricting markets for their *regular* competitive exports and by disrupting market prices."[21]

[21] Italics supplied. The admonition against disrupting world prices and in favor of promoting increased consumption calls to mind similar references in the major U.S. surplus disposal law, Public Law 480. The President of the United States is here required to "take reasonable precautions" to assure that commodity sales for foreign currencies "will not unduly disrupt world prices." In order to assure that the surplus exports under special terms are not merely a replacement of nor-

At the Tenth Session in November 1955, when reviewing the actual consultations during the first six months under the Resolution, the U.S. delegate explained that prior notification had been given and consultation sought by the United States in connection with all sales for foreign currencies. Three classes of surplus transactions had not been notified for prior consultation, however. Sales under Mutual Security (foreign aid) legislation had not been notified in advance because they were an integral part of the total aid program for the country concerned, based on its over-all need, and there was no presumption that shipments under this program would affect the division of normal commercial exports between the United States and other exporting countries. Grant shipments of surplus commodities for famine or emergency relief also had not been notified for prior consultation, because it was not considered likely that these transactions would displace commercial marketings; but if they did, there was a question whether the humanitarian aspects of such relief programs should be dominated by commercial considerations. "Barter" transactions were not notified for prior consultation because the foreign markets involved were determined by private traders, not by the Government. Nevertheless, in all cases where there was no prior notification the U.S. Government was ready to consult on a review basis regarding any transaction on which complaints were made. At that time, some delegates felt the consultation procedures had had some beneficial effect, while others considered that the results had not been fully satisfactory from their standpoint, in part because not enough time had been allowed. In view of the importance of the question, the CONTRACTING PARTIES decided to review the experience again at the next session.

Export price competition outside the scope of formal surplus disposal transactions also was discussed in the Ninth Session of the GATT, and it was agreed to propose the addition of several paragraphs of text and interpretation to Article XVI relating to subsidies. These would admonish that, under a domestic price-stabilizing system which entails export prices being lower than domestic prices, operations that are financed out of government funds should not be conducted in a manner "which results in the Contracting Party having more than *an equitable share* of world export trade in that product, account being taken of the shares of the Contracting Parties . . . during a previously representative

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mal U.S. exports, the importing country also is required to give formal assurance that such purchases are in addition to its usual purchases from the United States. (This requirement applies to surplus transactions under Public Law 480 but not to those under the Mutual Security Act.) Such assurance is not the same thing as assuring that these exports do not replace the normal export trade of *any* country; from the international viewpoint, the more desirable objective would evidently be an increase in world consumption.

period, and any special factors which may have affected or may be affecting such trade in the product."[22] U.S. agreement to the principle enunciated here was signified by U.S. approval of the proposed amendment, but its formal incorporation in the GATT Agreement awaits approval by other Contracting Parties.

Taken together, these GATT paragraphs on surplus disposal and price-stabilizing systems would cover all exports of (domestically) price-supported products from the United States. As the FAO noted in connection with its own principles, however, agreement on general principles does not automatically determine their application. Differences of opinion may arise over such questions as the definition of a normal trade pattern, an equitable share of the market, and the allowance that should be made for special factors. Underlying these questions may be a more basic economic question: How much stability can be injected into the world trade pattern through an agreement to maintain equitable shares,[23] before the gains to individual protected exporters begin to be outweighed by losses to the importers through failure to follow evolving shifts in comparative productivities? This question was apparently not overlooked by the working party which drafted the proposed amendment, for it "agreed that in determining what are equitable shares of world trade the Contracting Parties should not lose sight of the desirability of facilitating the satisfaction of world requirements of the commodity concerned in the most effective and economic manner. . . ."[24]

These reports on multilateral discussions have been cited to indicate an awareness by other countries that export competition from U.S. agricultural products is not limited to formal "surplus disposal" transactions, but can extend also to dollar sales under usual commercial terms. The official reports have tended to support the statistical indications of Table 4 that U.S. export policy has not yet resulted in any substantial increase in the U.S. share of world exports of the major commodities. It is encouraging also that a procedure of consultation has been established for the exchange of views of interested exporting and importing countries, although the complexity of interpreting statistical data and of applying the agreed principles of conduct may preclude complete satisfaction by all participants.

[22] Italics supplied.
[23] Reminiscent perhaps of cartels.
[24] Report of Review Working Party III on Barriers to Trade Other Than Restrictions or Tariffs (L/334, March 1, 1955).

# Changes in Competitive Strength and Export Shares of Major Industrial Countries

**J. M. Fleming and S. C. Tsiang***

THE PRINCIPAL AIM of this paper is to consider the extent to which changes in any one exporting country's share in the total of manufactured goods exported by a number of countries can be accounted for statistically by changes in the competitive strength, as measured by some price index, of that country.

The method adopted is somewhat unusual.[1] The customary and direct approach to such a problem is to correlate the variations in the amount of a single country's exports for a number of years with concurrent or preceding variations in its price level, relative to prices abroad, and any other relevant factors. This approach has the merit of revealing the differences between the price elasticities of world demand for the exports of different countries, but it tends to take account of simultaneous or short-run reactions only. In the present paper, however, export changes between a given pair of years are correlated, for a number of countries, with price changes between the same pair of years. This approach can yield only a "normal" or average elasticity of substitution in world demand between the exports of different countries, not strictly applicable to the exports of any individual country, but it has the merit of being capable—if the time interval chosen is a long one—of reflecting fairly long-run reactions.

It is clear that changes in country shares in the export trade are not entirely determined by changes in competitiveness, however measured;

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[1] It has, however, been applied on at least one previous occasion—by Professor A.J. Brown of Leeds University in a paper, "The Fundamental Elasticities in International Trade," *Oxford Studies in the Price Mechanism* (T. Wilson and P.W.S. Andrews, editors, Oxford, England, 1950).

they are also influenced by changes in demand conditions in the world market. Allowance has been made for such of these demand factors as are amenable to quantitative treatment. Estimates have been made of the extent to which changes in the export shares of different countries can be imputed to changes in the commodity composition or geographical distribution of world demand, and changes in price competitiveness have been correlated with changes in export shares adjusted to allow for the influence of these factors.

The countries whose shares of manufactured exports have been examined are the United States, the United Kingdom, France, West Germany, Canada, Italy, Belgium, the Netherlands, Switzerland, and Sweden. Since the behavior of West German exports was found to be exceptional, this country has generally been excluded from the calculations referred to below. Changes in price competitiveness and export shares have been examined for two postwar periods, 1948–53 and 1953–54.

## Relationship Between Competitiveness and Export Shares

### Definition of competitiveness

"Competitive strength" or "competitiveness" is a somewhat elusive concept. A country's competitiveness in a given market may be said to have increased when the volume of its exports to that market relative to the volume of other exporting countries tends to rise as a result of changes in export supply conditions in the exporting countries. This paper is concerned primarily with changes in *general* competitiveness, i.e., competitiveness with respect to the world market.

### Factors underlying competitiveness

Changes in competitive strength may be attributable to a combination of such factors as (1) differential rates of productivity growth in different countries, (2) changes in exchange rates, (3) changes in export taxation or subsidization, (4) differential rates of increase of national price levels, (5) differential rates of improvement in the quality of exports and differential rates of development of new products for export, (6) differential rates of improvement in the efficiency with which exports are marketed, and (7) differential changes in the extent to which export orders can be met promptly.

Factors 1 to 4 inclusive determine changes in the price competitiveness of the exports of different countries. Factors 5 to 7 constitute changes in the nonprice competitiveness of different countries. In particular, the existence of excess demand or of long order books for exports implies

that the exporting country concerned does not charge for its exports the full competitive prices at which the world market could just absorb the available supply. Such pricing policies—which were pursued fairly generally for a number of postwar years—tend to make mere availability of supplies for exports an important element of competitive strength apart from price competitiveness. With the gradual disappearance of supply shortages, however, it might be expected that the availability of supplies for export would gradually cease to be a factor of competitive strength, independent of price competitiveness.

Such factors as exchange rate adjustments and disparate rates of inflation tend to affect a country's real share of export markets in the same direction for all commodities and for all markets. But even exchange rate adjustments will not affect all export commodities or all export markets to the same proportionate extent, because of differences in the elasticity of demand and supply in these different commodities and markets. Differential national rates of inflation would be likely to exercise a less uniform effect on exports of different sorts than would exchange depreciation. Disinflation and the disappearance of supply shortages affect different export industries very unequally, and productivity developments are likewise very different in different industries. Productivity changes may be such that a country grows less competitive in one industry and more competitive in another.

### Other factors affecting export shares

Competitiveness alone does not determine a country's share in export markets. Import demand conditions in these markets are likely to change. For example, the commodity composition of imports into any given market may alter, either because the commodity composition of aggregate demand in the area alters with growing real income or because of changes in the competitiveness of import competing industries in the area. Since export countries specialize, to some extent, on different sorts of export commodities, a change in the commodity composition of import demand in any market will tend to alter the shares of exporting countries in the aggregate volume of exports to that market.

Again, any given market may be divided geographically into submarkets. For example, the world market is divided into national submarkets. These submarkets differ among themselves in regard to the proportions in which they customarily draw imports from different exporting countries. There are many reasons for this: differences in the commodity composition of imports, differences in geographical position vis-à-vis competing exporters, differences in taste and tradition, and, in some cases, differences in commercial policy. Thus changes which

eventually occur in the relative importing power of different submarkets tend to alter the volume shares of competing exporters in the market as a whole.

Another demand factor which may alter exporters' shares is change in the degree of preference for, or discrimination against, imports from different exporting countries in the market in question. Such change may be attributable to changes in tariff preferences, but significant short-term changes are usually the consequence of increasing or decreasing discrimination in the application of import restrictions imposed for balance of payments reasons.

### Other difficulties in determining relationship

Further difficulties in tracing the effects of changes in competitiveness on export shares arise from differences in the extent to which the exports of the several countries are substitutable for those of the remaining countries as a group, and the fact that a country may be affected particularly by the competition of certain other countries, so that its success in export markets will depend not only on its own competitiveness but on that of its close rivals. Thus it might happen that country A's costs fall relative to those of country B, and that A gains trade in certain markets at the expense of B, but that B nevertheless improves its share of trade relative to A, for example, because B's costs as well as A's costs fall relative to those of C, D, etc., and B gains more trade than does A at the expense of these countries, or because the costs of B's chief rival, C, have risen considerably while those of A's chief rival, D, have fallen.

Allowances can be made for some, but not all, of these demand factors which obscure the influence of changes in competitiveness on trade shares. For example, estimates can be made of the changes in the importance of different markets and of different commodities in international trade; and deductions can be drawn as to the changes in world market export shares that are attributable to the operation of these disturbing factors. To take full account of the differences between countries with respect to the elasticity of demand for their exports, and with respect to the influence of particular "rival" countries, would require a series of laborious calculations which are beyond the scope of the present analysis and for which it is doubtful that sufficient postwar data exist.

Not merely is it impossible to measure accurately the influence of various demand factors on the export shares, and thus to isolate the influence of general competitiveness; it is also impossible to give any unambiguous statistical indication of changes in general competitiveness as previously defined. A number of price indices exist or can be con-

structed which throw some light on changes in export competitiveness so far as that is a matter of changes in supply prices or money supply schedules. The factor of growth in availability of supplies (dwindling of shortages), however, cannot easily be measured and must be allowed for in a vague qualitative way.

## Setting of the Problem

In spite of these difficulties, it may be worth while to see what can be said about changes in competitiveness during recent years between some of the principal countries producing manufactured exports, and about the effects of these changes on country shares in the export trade in manufactured products.

The selection of the countries is dictated in part by the availability of data. Changes in relative competitiveness are considered over two periods, 1948–53 and 1953–54. The 1948–53 period was chosen, despite the imperfection of the 1948 data for several of the countries concerned, in order to give a picture of the long-run effects of changes in competitive positions resulting from the devaluations of 1949 and the price repercussions of the Korean war, which followed closely after the devaluations. It is tempting to divide this period into two parts in order to try to distinguish the effects of changes in competitive positions associated with the devaluations from those associated with the Korean war and its aftermath, and also in the hope that the second part of the period, which is less affected by supply shortages, might show more clearly the effects of price competitiveness. In fact, however, the Korean disturbances followed too closely on the heels of the devaluations for it to be possible to distinguish their effects. Calculations made in connection with the present study for the two subperiods 1948–50 and 1950–53 show less definite and less meaningful results for each of them than for 1948–53 as a whole.

Although the period 1953–54 is admittedly too short for changes in competitive strength to work out their full effects, it has been chosen to illustrate the most recent developments and to see whether, during a period in which trade is relatively free from controls and from major disturbances, the influence of price competitiveness increases.

## Changes in Price Competitiveness

As already indicated, price data do not fully reflect changes in competitiveness which is also affected by such things as changes in availa-

bility of supplies, changes in selling expenditure, and product variation to meet market requirements. However, some of these less tangible factors in competitiveness are themselves affected by the level of profits of export industries, and hence, indirectly, by the degree of price competitiveness achieved.

There is no single satisfactory measure of price competitiveness. Two obvious candidates are export unit values and efficiency wage costs.[2] (For international comparison, these have to be expressed in a common currency.)

The unit value of manufactured exports as an indicator of competitiveness in the export trade has the disadvantage of being influenced to a greater extent than the wage cost index by changes in demand conditions in export markets. The fact that export prices of one country decline more than those of other countries may be due not to increased competitiveness but to reduced demand for the exports of that particular country.

An index of efficiency wage costs in manufacturing is a magnitude arrived at by multiplying an index of hourly wage rates in manufacturing by an index of employment in manufacturing *times* an index of hours worked per week and dividing the product by an index of manufacturing output. The result obtained has the merit of reflecting only domestic costs. On the other hand, apart from errors in the measurement of labor costs arising from differences in coverage and the weighting of the component indices, it must be remembered that labor cost is only one of the elements—though the most important—in total costs, and that its relationship to the latter varies with any changes in the ratio of profits and cost of materials to wages. Moreover, as an indicator of competitive strength in export industries, this index gives undue weight to wage costs in industries producing mainly for the domestic market.

The increases in both the unit value and wage cost indices for the exporting countries considered over the periods 1948–53, 1953–54, and the entire period 1948–54 are shown by the data in Table 1. Since, for the purpose of this study, interest is not in absolute price changes but only in the ranking of countries, the index for each country has been "normalized" by being expressed as a ratio to the weighted index for the group of countries as a whole, each country in the group being weighted by its share in the value of manufactured exports of the group as a whole in the base year.

It should be emphasized that the data for individual countries are

[2] Consideration has also been given to wholesale prices and retail prices as possible indicators of competitiveness; these, however, not only appear less satisfactory in theory but also correlate with trade shares less well than either export unit values or efficiency wage costs.

TABLE 1. "NORMALIZED"[1] INDICES OF UNIT VALUES OF MANUFACTURED EXPORTS AND EFFICIENCY WAGE COSTS IN MANUFACTURING INDUSTRIES, MAJOR INDUSTRIAL COUNTRIES, 1953 AND 1954[2]

| | Unit Values of Manufactured Exports | Efficiency Wage Costs in Manufacturing Industries |
|---|---|---|
| | Indices for 1953 (1948 = 100) | |
| Netherlands | 70 | 72 |
| West Germany | 79 | 62 |
| Italy | 89 | 74 |
| Sweden | 89 | 99 |
| United Kingdom | 92 | 84 |
| Belgium–Luxembourg | 96 | 90 |
| Switzerland | 101 | 98 |
| France | 102 | 111 |
| United States | 106 | 112 |
| Canada | 129 | 136 |
| | Indices for 1954 (1953 = 100) | |
| Belgium–Luxembourg | 96 | 94 |
| Netherlands | 96 | 103 |
| West Germany | 98 | 98 |
| Sweden | 99 | 100 |
| France | 100 | 98 |
| United Kingdom | 100 | 100 |
| United States | 101 | 102 |
| Switzerland | 102 | 100 |
| Canada | 102 | 103 |
| Italy | 106 | 101 |
| | Indices for 1954 (1948 = 100) | |
| Netherlands | 67 | 73 |
| West Germany | 78 | 61 |
| Sweden | 88 | 98 |
| United Kingdom | 92 | 84 |
| Belgium-Luxembourg | 92 | 84 |
| Italy | 93 | 74 |
| France | 101 | 108 |
| Switzerland | 103 | 100 |
| United States | 107 | 114 |
| Canada | 132 | 138 |

[1] "Normalized" indices are indices for the individual countries relative to an average of the indices for the ten countries considered, weighted by the shares of the respective countries in the total value of manufactured exports of the group as a whole in the base year.

[2] For sources of data, see Appendices I and II.

not very reliable, especially those relating to West Germany, France, and Italy in 1948. This study, however, does not attempt to draw firm conclusions with respect to particular countries, but merely to see whether the imperfect country data can be used to throw light on the general relationship between competitiveness and trade shares. There are rather wide discrepancies between the movements in export unit

values and efficiency wage costs, particularly for West Germany, Italy, and Sweden in the period 1948–53, and for the Netherlands and Italy in the period 1953–54.

If export unit values are taken as the preferred indicators of price competitiveness, the Netherlands and West Germany are the countries whose price competitiveness apparently improved the most over the entire period 1948–54. These are followed by a group of countries which show a somewhat smaller though still significant increase in price competitiveness: Italy, Sweden, the United Kingdom, and Belgium. Countries which show a decline in apparent price competitiveness are—in order of increasing relative deterioration—Switzerland, France, the United States, and Canada. The causes of these developments are not within the province of this paper.

## Price Competitiveness and Export Shares

### Period 1948–53

As the next step in the analysis, a comparison was made between the 1953 "normalized" index (1948=100) of the volume of exports of manufactured goods to all destinations and the "normalized" indices of the unit value of manufactured exports and efficiency wage costs in manufactures, which are given in the top section of Table 1. This comparison is presented in Table 2.

From Table 2 and, more clearly, from the scatter diagrams shown in Chart 1, it can be seen that neither relative changes in the unit value of manufactured exports nor relative changes in efficiency wage costs in manufacturing industries provide much of an explanation of changes in trade shares in manufactured exports. Of the two, however, efficiency wage costs appear slightly less unsatisfactory: the coefficient of correlation between efficiency wage cost ratios and export volume ratios (both expressed in logarithms) is −0.69, compared with a coefficient of −0.53 for the correlation between unit values and the volume of exports.

In calculating the correlations for the 1948–53 period, however, the exceptional case of West Germany should be excluded from the observations, since the extraordinary expansion of its exports was undoubtedly due, to a large extent, to factors other than price competitiveness, notably to an increase in the availability of the suppy of exports. When West Germany is excluded, the correlation between relative efficiency wage costs and the relative export volume for 1948–53 deteriorates to −0.51, while that between relative export unit values and relative export volumes improves to −0.66. These correlations are still far from satisfactory. In particular, the exports of Italy and the United Kingdom

TABLE 2. "NORMALIZED" INDICES OF VOLUME OF MANUFACTURED EXPORTS, VALUES OF MANUFACTURED EXPORTS, AND EFFICIENCY WAGE COSTS IN MANUFACTURING INDUSTRIES, MAJOR INDUSTRIAL COUNTRIES, 1953[1]

*(1948 = 100)*

| | Volume of Manufactured Exports (1) | Unit Values of Manufactured Exports (2) | Values of Manufactured Exports (3) | Efficiency Wage Costs in Manufacturing Industries (4) |
|---|---|---|---|---|
| Netherlands | 220 | 70 | 161 | 72 |
| West Germany | 982 | 79 | 816 | 62 |
| Italy | 88 | 89 | 81 | 74 |
| Sweden | 95 | 89 | 89 | 99 |
| United Kingdom | 82 | 92 | 79 | 84 |
| Belgium-Luxembourg | 94 | 96 | 95 | 90 |
| Switzerland | 104 | 101 | 110 | 98 |
| France | 119 | 102 | 126 | 111 |
| United States | 68[2] | 106 | 75[2] | 112 |
| Canada | 78 | 129 | 105 | 136 |

[1] For description of "normalized" indices, see Table 1, footnote 1. For sources of data, see Appendices I and II.

[2] Exclusive of U. S. manufactured exports in the Special Categories group (see Appendix I, paragraph 6).

made less progress, and those of France and the Netherlands more progress, in world markets than might have been expected on the basis of relative costs. Clearly, as the considerations set forth in earlier sections of this paper would indicate, cost or price competitiveness is not the only factor determining the relative expansion of manufactured exports of different countries.

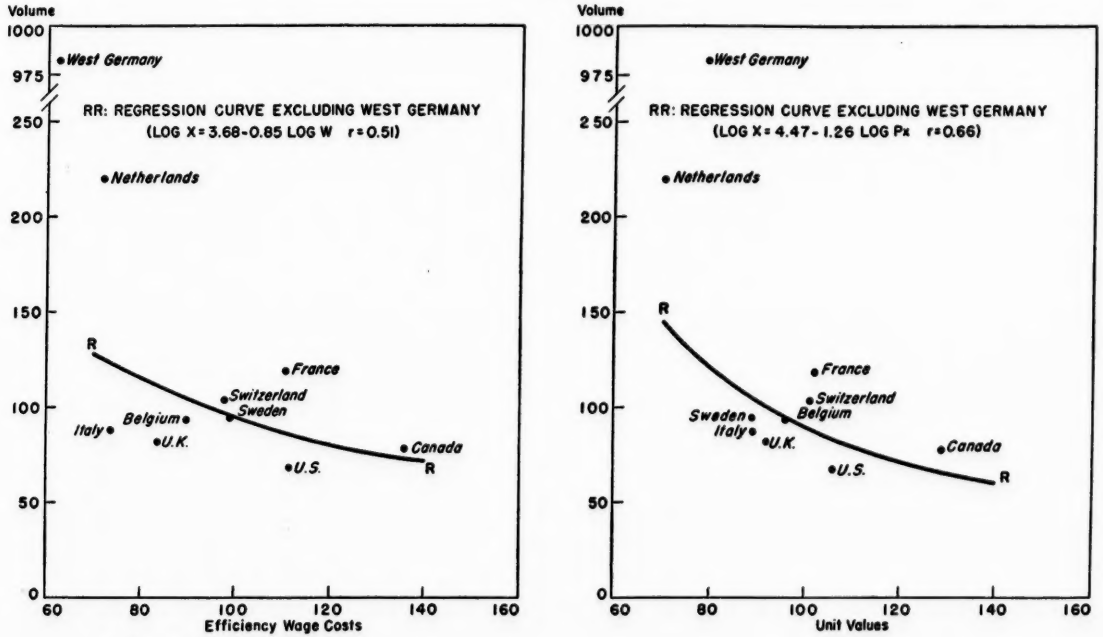
### EFFECTS OF CHANGES IN IMPORT DEMAND FOR MANUFACTURED EXPORTS

An examination of changes in the commodity composition and geographical pattern of manufactured exports may throw some light on the influence of changes in import demand on the relative progress made by manufacturing exporters. Changes in the relative importance of different markets are clearly determined from the side of import demand. Changes in the relative importance of different export commodities might arise from the side of either export supply or import demand; but since changes in the relative supply of different commodities are likely to be offset by changes in price, while changes in relative demand for different commodities are likely to be magnified by changes in price, changes in commodity composition, when measured in value rather than in volume, are more likely to reflect demand than supply factors. An attempt is therefore made below to eliminate from the actual changes

CHART 1. COMPARISON OF "NORMALIZED" 1953 INDICES OF VOLUME OF MANUFACTURED EXPORTS WITH "NORMALIZED" INDICES OF (1) EFFICIENCY WAGE COSTS IN MANUFACTURING INDUSTRIES AND (2) UNIT VALUES OF MANUFACTURED EXPORTS, MAJOR

CHART 1. COMPARISON OF "NORMALIZED" 1953 INDICES OF VOLUME OF MANUFACTURED EXPORTS WITH "NORMALIZED" INDICES OF (1) EFFICIENCY WAGE COSTS IN MANUFACTURING INDUSTRIES AND (2) UNIT VALUES OF MANUFACTURED EXPORTS, MAJOR INDUSTRIAL COUNTRIES[1]

(*1948 = 100*)




[1] Indices in Tables 1 and 2.

in export shares the presumed influence of changes in the commodity composition, as well as in the market distribution of manufactured exports.

For the purpose of eliminating, as far as the availability of data will permit, the influence of changes in the relative importance of exports of different commodity groups, total manufactured exports have been classified in six broad categories: metals and manufactures, machinery, transport equipment, chemicals, textiles, and other manufactures.

The method applied to eliminate the effect of changes in commodity composition is that of dividing the actual index for 1953 (1948 = 100) of the volume of each country's exports by the export index which that country would have had in 1953 if it had maintained its 1948 share in the exports in each commodity class of our group of exporting countries as a whole. The resulting ratios are then "normalized," i.e., expressed as a percentage of the average of the indices for the ten countries.[3]

The commodity classification is available only for export values, not for export volumes. This, as shown above, is a positive advantage from the standpoint of isolating demand effects. Moreover, since changes in the commodity distribution of exports are rather small proportionately, the associated price effects also are probably rather small proportionately. It is therefore permissible to use values rather than volumes for the purpose of calculating the adjustment for changes in the commodity structure of export trade, though the adjustment, when made, will be applied to volume figures.

Of the commodity groups listed above, the largest expansion in the value of exports between 1948 and 1953 occurred in "other manufactures" (68 per cent). The increases (or decreases) in other commodity groups are 56 per cent for machinery, 53 per cent for chemicals, 34 per cent for metals and manufactures, 20 per cent for transport equipment, and minus 15 per cent for textiles. It is noteworthy that exports of textiles not only did not keep pace with those of other commodity groups, but actually declined substantially over the period.

The effects of eliminating the presumed influence of these changes in the relative importance of different commodity groups in the export trade are shown in Table 3 and Chart 2, section 1. These data show that some of the developments in trade shares which appeared surprising in the light of the relative changes in cost competitiveness over the 1948–53 period are partially accounted for by the changes in the relative importance of different commodity groups. Thus, the surprisingly small expansion of Italy's exports of manufactured goods appears to have been

[3] Fuller information regarding the method of adjustment for changes in commodity composition and regarding sources of the data used for this purpose is given in Appendix III.

TABLE 3. PRESUMED EFFECTS OF CHANGES BETWEEN 1948 AND 1953 IN THE RELATIVE IMPORTANCE OF EXPORT TRADE IN DIFFERENT COMMODITY GROUPS ON CHANGES IN SHARES OF MANUFACTURED EXPORTS, MAJOR INDUSTRIAL COUNTRIES[1]

(*1948 = 100*)

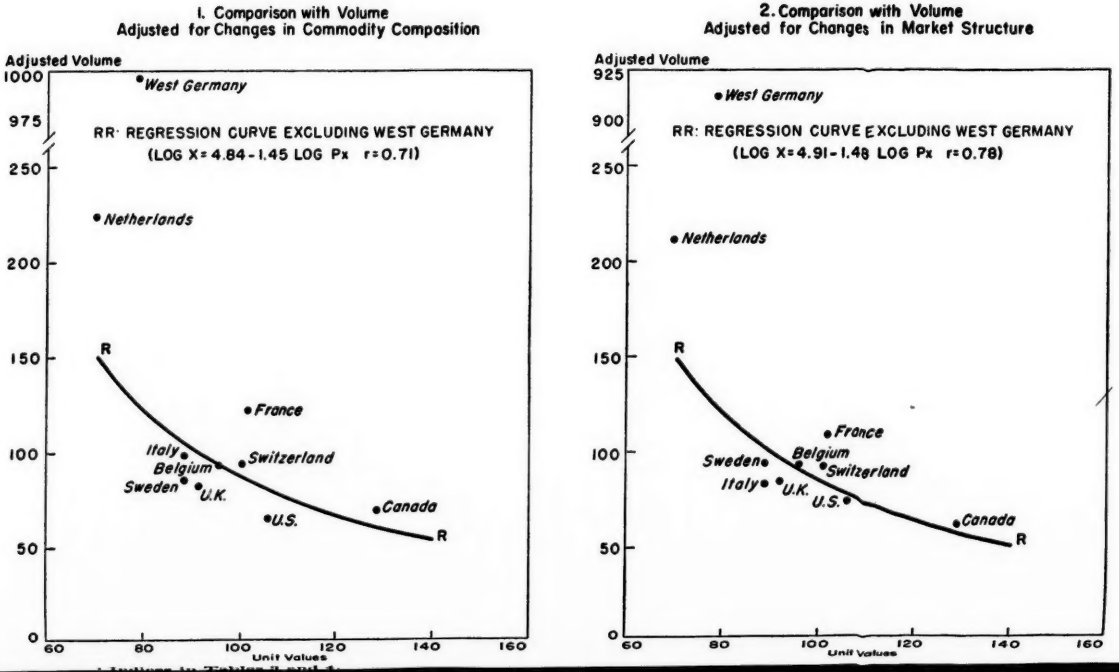
| | 1953 Indices of Volume of Mfd. Exports (1) | Adjustment Factors[2] (2) | 1953 Indices of Volume of Mfd. Exports, Adjusted[3] (3) | Indices in Col. 1 "Normalized"[4] (4) | Indices in Col. 3 "Normalized"[4] (5) |
|---|---|---|---|---|---|
| Netherlands | 320 | 131 | 245 | 220 | 224 |
| West Germany | 1,431 | 132 | 1,088 | 982 | 997 |
| Italy | 128 | 118 | 108 | 88 | 99 |
| Sweden | 138 | 147 | 94 | 95 | 86 |
| United Kingdom | 119 | 131 | 91 | 82 | 83 |
| Belgium-Luxembourg | 138 | 134 | 103 | 94 | 94 |
| Switzerland | 152 | 148 | 103 | 104 | 94 |
| France | 173 | 130 | 134 | 119 | 123 |
| United States | 99 | 137 | 72 | 68[5] | 66 |
| Canada | 113 | 148 | 76 | 78 | 70 |

[1] For sources of data, see Appendices I and III.
[2] Index of hypothetical value of manufactured exports in 1953, on assumption that shares in each commodity group were the same as in 1948. See Appendix III.
[3] Adjusted to eliminate effects of changes in commodity composition. Obtained by dividing column 1 by column 2.
[4] "Normalized" as described in Table 1, footnote 1. The index in column 4 is also given in Table 2, column 1.
[5] See Table 2, footnote 2.

due in part to the heavy concentration of its exports in the textile group, which, as we have seen, declined severely in relative importance; while the favorable results for Switzerland and Canada are due in part to the concentration of their exports on one, or more than one, of the fast expanding commodity groups, viz., "other manufactures," "machinery," and "metals and manufactures." However, West Germany's extraordinary export expansion, and France's surprisingly good performance in spite of its apparently unfavorable change in price competitiveness, appear all the more remarkable after the elimination of the presumed influence of changes in the commodity structure of world trade. Moreover, the surprisingly low export figure of the United Kingdom, in spite of the fairly favorable development of its price competitiveness, cannot be attributed to this factor to any considerable extent. On the whole, the correlation between changes in price competitiveness and changes in the share of manufactured exports over the period 1948–53 appears to be improved significantly by the adjustment for changes in the relative importance of trade in different commodity groups. If West Germany is excluded from the calculation, as a country whose export share is clearly much influenced by a rise in competitiveness expressed otherwise

CHART 2. COMPARISON OF "NORMALIZED" 1953 INDICES OF UNIT VALUES OF MANUFACTURED EXPORTS WITH "NORMALIZED" INDICES OF VOLUME OF MANUFACTURED EXPORTS, ADJUSTED, MAJOR INDUSTRIAL COUNTRIES[1]

(*1948 = 100*)



than through price, the elimination of the influence of changes in commodity structure raises the correlation between changes in relative export volume and changes in relative export unit value from −0.66 to −0.71. The adjustment for changes in commodity structure exercises a similarly favorable effect on the correlation between changes in export shares and changes in relative efficiency wage costs. But after the adjustment, as well as before, export unit values show a better correlation than wage costs.

A calculation analogous to that described above has also been undertaken to eliminate the influence of change in the relative importance of different markets. For this purpose, the world market has been divided into the following ten areas: the United States, Canada, Latin America, continental OEEC countries, OEEC sterling countries, non-OEEC sterling countries, Eastern Europe, British dependencies, French dependencies, and the rest of the world. A calculation has been made to determine what the value of exports of manufactured goods of each of our exporting countries would have been in 1953 if the country had retained its 1948 share in the exports of the group of exporting countries to each of the ten markets. For each exporting country, the ratio of the actual volume of exports in 1953 to this hypothetical export figure has been divided by the average ratio for all countries in the group and expressed as a percentage. The resulting figure is deemed to show the change in trade shares which is due to factors other than changes in the relative importance of different area-markets.[4]

Of these area-markets, the largest increases in imports of manufactured goods produced by our exporting countries over the 1948–53 period are those for the United States (about 150 per cent), Canada (85 per cent), British dependencies (75 per cent), continental OEEC countries (65 per cent), and French dependencies (65 per cent). On the other hand, imports of manufactured goods into Latin America and OEEC sterling countries appear to have been comparatively stationary over the period, while imports into Eastern Europe and non-OEEC sterling countries other than British dependencies actually declined.

The results of eliminating the presumed influence of changes from 1948 to 1953 in the relative importance of different markets are shown in Table 4 and Chart 2, section 2. These results again help to explain some of the developments in trade shares that appeared out of line with the developments in cost competitiveness. For instance, part of the export success of France, Switzerland, and the Netherlands appears to be attributable to changes in the geographical pattern of world demand, and this factor may also explain the relatively good showing of Canada, the United States, and the United Kingdom.

[4] Fuller information regarding the adjustment for changes in the relative importance of different markets is given in Appendix IV.

TABLE 4. PRESUMED EFFECTS OF CHANGES BETWEEN 1948 AND 1953 IN THE RELATIVE IMPORTANCE OF DIFFERENT MARKETS ON CHANGES IN SHARES OF MANUFACTURED EXPORTS, MAJOR INDUSTRIAL COUNTRIES[1]

*(1948 = 100)*

| | 1953 Indices of Volume of Mfd. Exports (1) | Adjustment Factors[2] (2) | 1953 Indices of Volume of Mfd. Exports, Adjusted[3] (3) | Indices in Col. 1 "Normalized"[4] (4) | Indices in Col. 3 "Normalized"[4] (5) |
|---|---|---|---|---|---|
| Netherlands | 320 | 143 | 224 | 220 | 212 |
| West Germany | 1,431 | 148 | 964 | 982 | 912 |
| Italy | 128 | 145 | 88 | 88 | 83 |
| Sweden | 138 | 138 | 100 | 95 | 95 |
| United Kingdom | 119 | 133 | 90 | 82 | 85 |
| Belgium–Luxembourg | 138 | 138 | 100 | 94 | 94 |
| Switzerland | 152 | 155 | 98 | 104 | 93 |
| France | 173 | 151 | 115 | 119 | 109 |
| United States | 99 | 124 | 80 | 68[5] | 75 |
| Canada | 113 | 171 | 66 | 78 | 62 |

[1] For sources of data, see Appendices I and IV.
[2] Index of hypothetical value of manufactured exports in 1953, on assumption that shares in each market were the same as in 1948. See Appendix IV.
[3] Adjusted to eliminate effects of changes in market structure. Obtained by dividing column 1 by column 2.
[4] "Normalized" as described in Table 1, footnote 1. The index in column 4 is also given in Table 2, column 1.
[5] See Table 2, footnote 2.

This adjustment for changes in market structure improves the correlation between changes in relative export volumes and changes in relative export unit values between 1948 and 1953 (if West Germany is excluded from the calculation) from −0.66 to −0.78.

If changes in the relative importance of different markets and changes in the commodity composition of world demand may be assumed to have operated independently of each other, the presumed influences of these two factors may be successively eliminated by the processes described above, so as to adjust the actual changes in export shares to allow for the combined influences of changes in the relative importance of different commodity groups and of different markets. This is done in Table 5. The relationship between changes in trade shares, adjusted to take account of changes in commodity composition and market structure of world demand for manufactured exports on the one hand, and changes in wage costs on the other, is illustrated by Chart 3.

From Table 5 and Chart 3 it can be seen that the allowances for these factors are by no means negligible and mostly tend to improve the correlation between changes in relative export volumes and in relative unit values (when West Germany is excluded from the calculations). The

TABLE 5. PRESUMED COMBINED EFFECTS OF CHANGES BETWEEN 1948 AND 1953 IN THE RELATIVE IMPORTANCE OF DIFFERENT COMMODITY GROUPS AND DIFFERENT MARKETS ON CHANGES IN SHARES OF MANUFACTURED EXPORTS, MAJOR INDUSTRIAL COUNTRIES

*(1948 = 100)*

| | 1953 Indices of Volume of Mfd. Exports[1] (1) | Adjustment Factors[2] (2) | 1953 Indices of Volume of Mfd. Exports, Adjusted[3] (3) | Indices in Col. 1 "Normalized"[4] (4) | Indices in Col. 3 "Normalized"[4] (5) |
|---|---|---|---|---|---|
| Netherlands | 320 | 188 | 171 | 220 | 216 |
| West Germany | 1,431 | 195 | 732 | 982 | 927 |
| Italy | 128 | 172 | 74 | 88 | 94 |
| Sweden | 138 | 202 | 68 | 95 | 86 |
| United Kingdom | 119 | 174 | 68 | 82 | 87 |
| Belgium–Luxembourg | 138 | 185 | 74 | 94 | 94 |
| Switzerland | 152 | 229 | 66 | 104 | 84 |
| France | 173 | 195 | 89 | 119 | 112 |
| United States | 99 | 170 | 58 | 68[5] | 74 |
| Canada | 113 | 253 | 45 | 78 | 57 |

[1] For source of data, see Appendix I.
[2] Obtained by multiplying the adjustment factors in Table 3 and 4 and dividing by 100.
[3] Adjusted to eliminate effects of changes in commodity composition and market structure. Obtained by dividing column 1 by column 2.
[4] "Normalized" as described in Table 1, footnote 1. The index in column 4 is also given in Table 2, column 1.
[5] See Table 2, footnote 2.

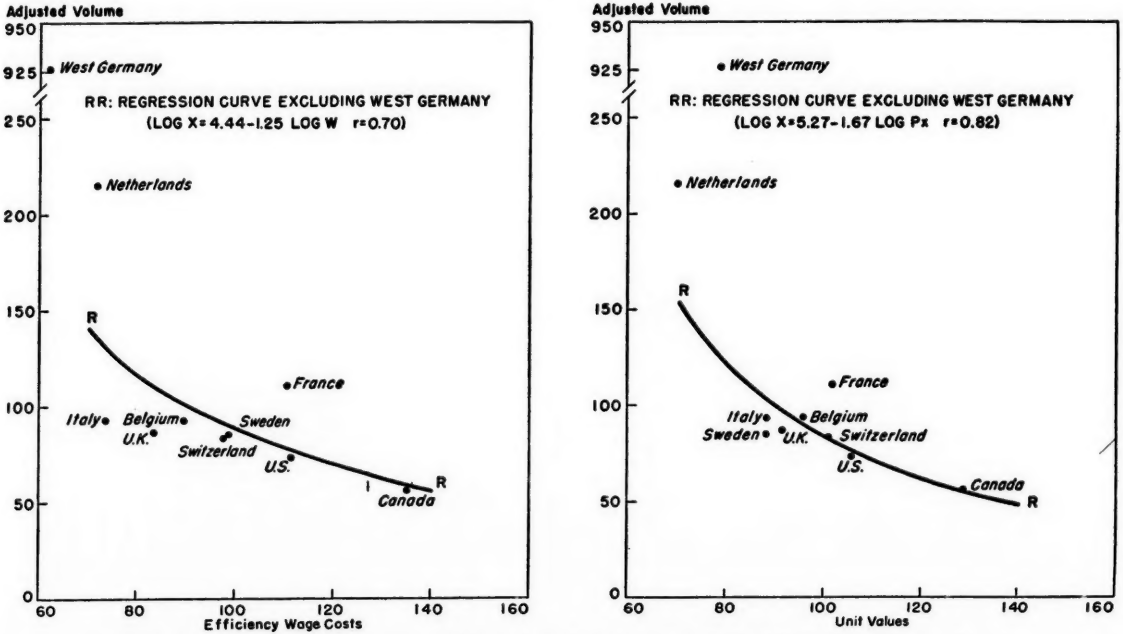
export increases in Switzerland and Canada, which are larger than would be expected on grounds of changes in price competitiveness, are partly explained by the commodity and market structures of their export trade. The surprisingly large export expansion in the Netherlands and France is partly attributable to the relatively large expansion of their markets. On the other hand, the smallness of the export expansion in the United Kingdom, given the changes in its price competitiveness, is partly accounted for by a relatively unfavorable market and commodity structure, while the smallness of the export expansion in Italy and in the United States is partly attributable in the former case to the commodity structure, and in the latter case to the market structure, of its exports.

The only country for which export changes become more rather than less easy to explain after adjustments have been made for the commodity and market structure of exports is Sweden, whose export change as adjusted appears to be less than would be expected on grounds of price competitiveness.

The combination of commodity and market adjustments raises the correlation between changes in relative export volumes and those in relative export unit values for the 1948–53 period (when West Germany

CHART 3. COMPARISON OF "NORMALIZED" 1953 INDICES OF VOLUME OF MANUFACTURED EXPORTS, ADJUSTED,[1] WITH INDICES OF (1) EFFICIENCY WAGE COSTS IN MANUFACTURING INDUSTRIES[2] AND (2) UNIT VALUES OF MANUFACTURED EXPORTS,[3] MAJOR INDUSTRIAL COUNTRIES

(*1948 = 100*)




[1] Adjusted for both commodity composition and market structure. Indices in Table 4, column 5.
[2] Indices in Table 2, column 4.
[3] Indices in Table 3, column 2.

is excluded from the computation) from −0.66 to −0.82. If relative efficiency wage costs were substituted for relative export unit values as an index of price competitiveness, the correlation, after adjustments for commodity and market structure, would be only −0.70. The elasticity of substitution in the demand for the exports of our group of countries (excluding West Germany), implied in the logarithmic regression coefficient, amounts to almost −1.7. That is to say, a difference of 1 per cent in the export unit value ratios of any two countries for 1953 over 1948 tended, on the average, to be associated with a difference of 1.7 per cent, in the opposite direction, in their export volume ratios.

These conclusions are, of course, subject to considerable uncertainty. If it is assumed that discrepancies between the actual (adjusted) export changes and their calculated values based on changes in unit values are of a random character, there is a 50 per cent chance that the true substitution coefficient is not greater than −1.95 or less than −1.4, and a 95 per cent chance that it is not greater than −2.60 or less than −0.75.

The principal countries, other than West Germany, whose export changes as adjusted are out of line with theoretical expectations on grounds of price competitiveness are the Netherlands and France, which exported more, and Italy, Sweden, and the United Kingdom, which exported less, than the values calculated on the basis of changes in export unit values. West Germany has been excluded from the calculation on a priori grounds, and its exports are, of course, far in excess of what appears, from the results for other countries, to be normal in the light of the changes in its export unit value.

As already explained, it is not to be expected even in principle that each country's results should be on the "normal" curve of relationship between changes in export volumes and in export unit values. Nevertheless, some part of the discrepancies shown in Chart 3, right section, is probably attributable to changes in nonprice competitiveness,[5] particularly to changes in the degree of supply shortage affecting exportable goods. The spectacular increase in the export share of West Germany can almost certainly be put down to the satisfaction, through increased availability, of previously unsatisfied foreign demand for its exports. A similar factor may have operated, though to a much lesser degree, in promoting the exports of the Netherlands, and even, perhaps, of France. The reverse is true of the United Kingdom; in that country, while exportable goods were certainly in scarce supply in 1948, they probably remained so, to a greater extent than in most competing countries, even in 1953, so that the supply shortage declined less markedly than in competing countries. The same was probably true, though for a different

[5] Factors 5-7 listed in an earlier section, "Factors Underlying Competitiveness."

[1] Adjusted for both commodity composition and market structure. Indices in Table 4, column 3.
[2] Indices in Table 2, column 4.
[3] Indices in Table 2, column 2.

reason, in the United States, Canada, and Switzerland, where supply shortages were relatively unimportant even in 1948 and there was little scope for improvement in this respect.

The relative weakness of this factor of increased availability, or nonprice competitiveness, in Canada and the United States would lead one to expect their 1953 export volumes to lie somewhat below the normal curve of relationship between volume and unit value. The fact that they lie approximately on the normal curve may be attributable to another factor, the absence of whose influence would otherwise call for comment, namely, to the change which is presumed to have taken place between 1948 and 1953 in the degree of anti-dollar discrimination in import demand in various markets of the world. In the United Kingdom the loss of discriminatory preference would tend to reinforce, while in the United States, Canada, and Switzerland the decline in adverse discrimination would tend to offset, the effects of a relative decline in nonprice competitiveness.

### Period 1953–54

Computations similar to those described in preceding sections of this paper have been carried out for changes in volumes and in unit values of manufactured exports for the same set of countries for the period 1953–54. The relevant data are shown in Table 6 and Chart 4.

As in the earlier comparisons, relative export unit values are preferred to relative efficiency wage costs as a measure of price competitiveness. Changes in the former correlate much better than changes in the latter with changes in export volumes.

In a mere one-year interval, such as that of 1953–54, current changes in price competitiveness do not have time to work out their full influence on trade shares, and preceding changes in competitiveness are still in process of taking effect. Moreover, chance factors are bound to be more important in relation to the relatively small movements taking place in such a short period. It is therefore not surprising that the correlation between ratios of export volume (unadjusted) and ratios of export value for the various exporting countries including West Germany should be no higher than $-0.68$. More disappointing is the fact that adjustments for changes in commodity composition and market structure, instead of improving the correlation, actually worsen it and result in a correlation coefficient of only $-0.55$. In part this may be because the adjustment is excessive. Insofar as the change in commodity composition and the change in the relative importance of different markets are mutually interrelated, a cumulation of the adjustment factors for the two types of change may involve some double counting.

TABLE 6. INDICES OF VOLUME OF MANUFACTURED EXPORTS, UNADJUSTED AND ADJUSTED FOR CHANGES IN COMMODITY COMPOSITION AND MARKET STRUCTURE, AND INDICES OF UNIT VALUES OF MANUFACTURED EXPORTS, MAJOR INDUSTRIAL COUNTRIES, 1954[1]

(*1953 = 100*)

| | Indices of Volume of Mfd. Exports (1) | Adjustment Factors[2] (2) | Indices of Volume of Mfd. Exports, Adjusted[3] (3) | Indices in Col. 1 "Normalized"[4] (4) | Indices in Col. 3 "Normalized"[4] (5) | Indices of Unit Values of Mfd. Exports, "Normalized"[4] (6) |
|---|---|---|---|---|---|---|
| Netherlands | 118 | 120 | 98 | 108 | 103 | 96 |
| West Germany | 126 | 120 | 105 | 115 | 110 | 98 |
| Italy | 104 | 118 | 88 | 95 | 92 | 106 |
| Sweden | 119 | 119 | 100 | 108 | 104 | 99 |
| United Kingdom | 106 | 116 | 92 | 97 | 96 | 100 |
| Belgium–Luxembourg | 110 | 118 | 93 | 100 | 98 | 96 |
| Switzerland | 102 | 117 | 87 | 93 | 91 | 102 |
| France | 112 | 117 | 95 | 102 | 100 | 100 |
| United States | 106 | 110 | 96 | 96 | 100 | 101 |
| Canada | 100 | 103 | 98 | 92 | 102 | 102 |

[1] Data on volume and unit values have been supplied by the Statistical Office of the United Nations. See Appendix I.

[2] Adjustment factors are based on data in *OEEC Foreign Trade Statistical Bulletin, Series IV*. See Appendices III and IV.

[3] Adjusted to eliminate effects of changes in commodity composition and market structure. Obtained by dividing column 1 by column 2.

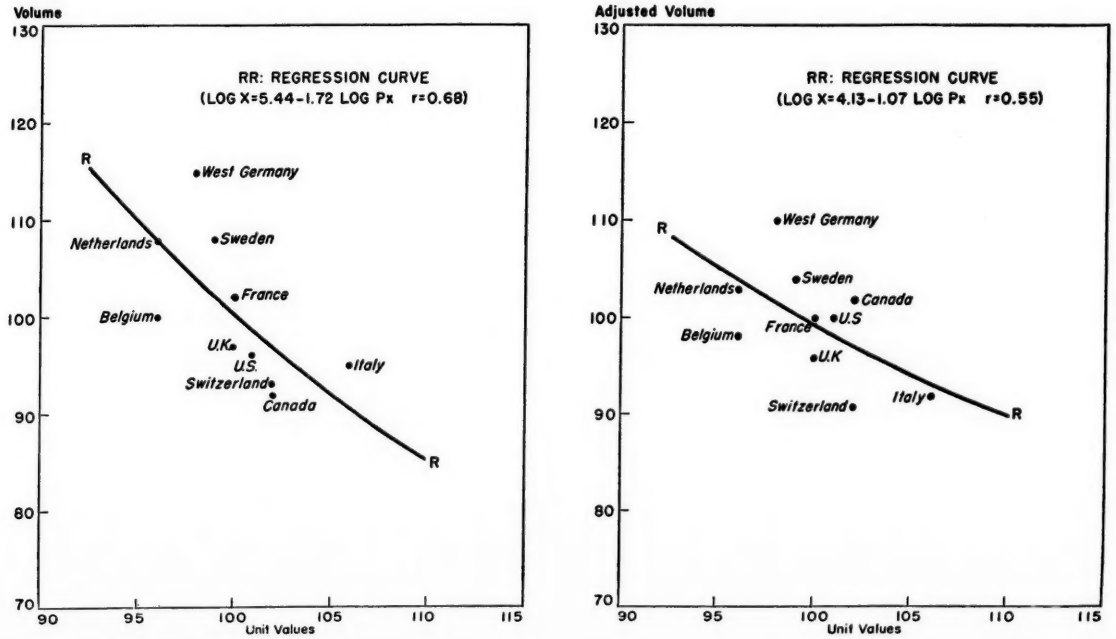
[4] "Normalized" as described in Table 1, footnote 1.

It is unlikely, however, that this factor was of great importance in the present instance, since the changes in commodity structure were very small and practically the whole of the adjustment made was in order to correct for changes in the market structure of the trade. It therefore seems preferable, despite the adverse effect on the correlation coefficient, to use adjusted, rather than unadjusted, export volumes. The effect of this adjustment is to magnify the increases in export volumes of Canada and the United States—whose exports had been adversely affected by the decline in mutual trade associated with the North American recession in those years—and to diminish the export increases of other countries, especially those selling a high proportion of their exports on the booming European market.

The inclusion of West Germany in the group of exporting countries for which the above-mentioned correlations have been calculated is justified by the fact that the behavior of German exports from 1953 to 1954 was no longer as exceptional as it had been from 1948 to 1953. This presumably is because by 1953 much less scope remained in Germany

CHART 4. COMPARISON OF "NORMALIZED" 1954 INDICES OF VOLUME OF MANUFACTURED EXPORTS UNADJUSTED AND ADJUSTED FOR CHANGES IN COMMODITY COMPOSITION AND MARKET STRUCTURE WITH "NORMALIZED" INDICES OF UNIT VALUES OF MANUFACTURED EXPORTS, MAJOR INDUSTRIAL COUNTRIES[1]

(*1953 = 100*)




[1] Indices in Table 6.

for further increases in export competitiveness expressed otherwise than through prices.

The most probable value of the logarithmic regression coefficient between export volume ratios (adjusted for changes in the commodity and market situations) and export unit value ratios was almost −1.1, meaning that a 1 per cent difference in the export unit value ratios of any two countries tends to be associated with a difference of 1.1 per cent, in the opposite direction, in their export volume ratios. The most probable elasticity of substitution between the manufactured exports of different countries for 1953–54 is thus somewhat less than that for 1948–53 (−1.7). Substitution would naturally be less for a one-year than for a four-year period, though the increased competitiveness which almost certainly existed in the world market in the later of the two periods studied here presumably tended to raise the elasticity of substitution for 1953–54, compared with that for 1948–53. It is perhaps worth mentioning that the logarithmic regression coefficient for changes in *unadjusted* export volumes and changes in export unit values is almost −1.7, approximately the same as the 1948–53 figure.

However, neither of the regression coefficients for the 1953–54 period has much statistical significance. There is a 50 per cent chance that the regression coefficient for *adjusted* export volumes and export unit values will be between −0.71 and −1.42, and that the coefficient for *unadjusted* export volumes and unit values will be between −1.31 and −2.12. It would be a mistake to spend much time in explaining discrepancies from a statistical relationship which is itself highly uncertain. The fact that the (adjusted) export increase for West Germany still lies well above the regression line probably indicates that increasing availability of supply or improved marketing arrangements still operate to increase its competitiveness in ways not dependent on a cheapening of relative prices. The surprisingly good results of the United States and Canada may reflect in part an easing of supply conditions associated with the North American recession and in part a decline in discrimination in the rest of the world against dollar exports.

### Influence of prewar export shares on postwar export shares

In order to determine what bearing abnormalities in the initial (1948) position of the various exporting countries, arising out of wartime dislocations of production and trade, may have had upon the ensuing development of their respective trade shares, comparisons have been made for each country in our group between the proportionate decline in the volume of manufactured exports from 1938 to 1948 and the proportionate increase in these exports from 1948 to 1953, expressed in

Unit Values
¹ Indices in Table 6.

TABLE 7. CHANGES IN SHARES OF MANUFACTURED EXPORTS FROM 1938 TO 1948 AND FROM 1948 TO 1953, MAJOR INDUSTRIAL COUNTRIES[1]

(*Weighted*[2] *average ratio = 100*)

| | Ratio of Volume of Exports in 1938 to Volume in 1948[3] | Ratio of Volume of Exports in 1953 to Volume in 1948[3] |
|---|---|---|
| West Germany | 1,450[4] | 982 |
| Netherlands | 159 | 220 |
| Sweden | 120 | 95 |
| Belgium–Luxembourg | 118 | 94 |
| Italy | 117 | 88 |
| France | 108 | 119 |
| Switzerland | 100 | 104 |
| United Kingdom | 83 | 82 |
| Canada | 59[5] | 78 |
| United States | 46 | 68 |

[1] Indices relating to 1938 and 1948 are based on data from UN Economic Commission for Europe, *Economic Survey of Europe Since the War* (Geneva, 1953), and Dominion Bureau of Statistics, *Trade of Canada*. Indices relating to 1948 and 1953 are also given in Table 3, column 4.

[2] The weights are the proportionate shares of the respective countries in the total value of manufactured exports of the group as a whole in the base year.

[3] The 1938–48 indices and the 1948–53 indices are on different bases of commodity classification. However, the resulting discrepancy does not appear to be very great.

[4] Whole of Germany for 1938.

[5] Volume index obtained by deflating values of manufactured exports by domestic wholesale price of manufactures. The 1938 export value refers to fiscal year ended March 31, 1939.

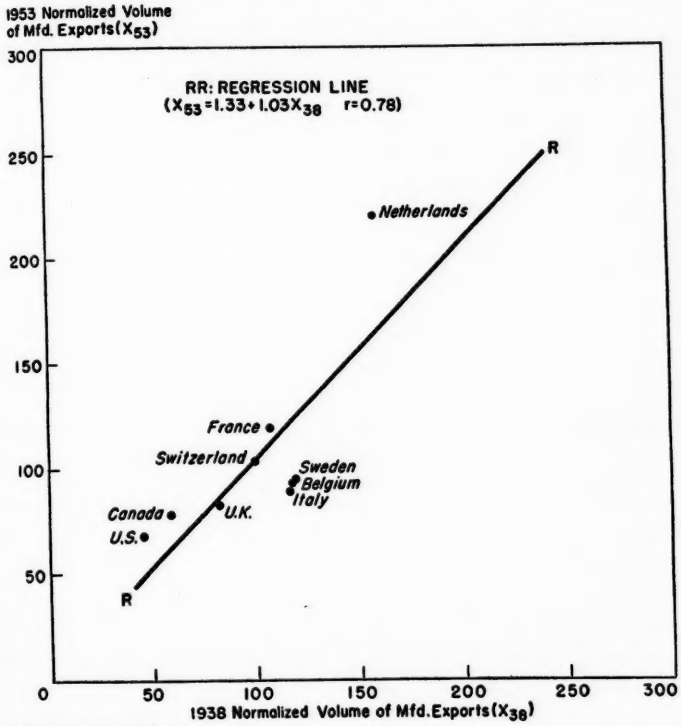
each case as a percentage of the average change for the group as a whole. The relevant data are shown in Table 7 and Chart 5.

A remarkably high positive correlation is found between the relative volumes of exports of these countries in 1938 (compared with 1948) and those in 1953 (also compared with 1948). The correlation coefficient is as high as 0.994. This extraordinarily high correlation, however, is due largely to the extreme observation of West Germany, whose exports in 1948 were reduced to negligible dimensions in comparison with either 1938 or 1953. Moreover, the prewar and postwar figures are not comparable, the former relating to the whole of prewar Germany, the latter to West Germany only. For these reasons, West Germany has been excluded from all further calculations. When West Germany is excluded, the coefficient of correlation between 1938 and 1953 exports, respectively (both on a 1948 basis), falls to 0.78.

These results suggest that the changes over the 1948–53 period in the export shares of the different countries of our group represent, to a considerable extent, a tendency toward the restoration of relative prewar

CHART 5. CHANGES FROM 1938 TO 1948 AND FROM 1948 TO 1953 IN COUNTRIES' SHARES OF MANUFACTURED EXPORTS[1]

*("Normalized" indices 1948 = 100)*




[1] Indices in Table 7.

shares in export trade after the severe dislocations wrought by the war. In particular, the substantial increase in the export share of the Netherlands—not to mention the much more extreme case of West Germany—is accounted for in part by the fact that the Netherlands share of trade in 1948 was well below its prewar share. On the other hand, the sharp decline in the trade shares of the United Kingdom and, still more, the United States appear to be associated with the fact that these two countries, and especially the United States, in 1948 had far more than their prewar share of world trade, owing in part to the temporary difficulties of their main competitors.

It is noteworthy that (with West Germany excluded from the calculation) the regression of the 1948–53 export change on the 1938–48 export change is not far from unity, and the regression line practically passes through the origin (Chart 5). This suggests that (with the possible exception of West Germany) the tendency to restore prewar shares had had time by 1953 to work itself out rather fully. This, of course, does not mean that by 1953 each country had recovered precisely its prewar share of the joint export trade.

This tendency for countries to recover their respective prewar shares in export trade is, of course, not an explanation of postwar developments but a fact that requires explanation itself. Broadly speaking, the explanation might be either that import demand conditions are returning to normal, or that export supply conditions are returning to normal. In the light of the circumstances prevailing in the countries concerned, there can be little doubt that it is the second influence that is predominant. There may have been some tendency for the demand schedule for German products to be abnormally low and that for U.S. products to be abnormally high in the early postwar years, owing to the lagged effect of wartime interruptions to trade and communications. In the main, however, the abnormal structure of export shares in these years must be attributed to abnormalities in the relative export supply schedules, especially if these are taken to include such elements as the absence of normal sales organizations in foreign markets.

The main implication for import demand conditions is probably that these demand conditions have not been altered substantially since prewar years, despite the changes since that time. Prewar goodwill had, on the whole, not been lost.

The abnormal export supply conditions in early postwar years were no doubt attributable to abnormalities both in the ability to produce for export and in the need to export. Thus for many European countries the need to export in competition with the United States was temporarily reduced, over much of the postwar period, by the receipt of substantial financial assistance from the United States; but as this assistance dwindled, the need to export increased.

Such divergencies as appear in Chart 5 between the movements in trade shares from 1948 to 1953 and those required to restore prewar relations are presumably due to differences in the speed of restoration of normal export supply conditions, discrepancies between 1938 shares and the prewar norm, or changes between the prewar and the postwar norm (owing, for example, to changes in the relative economic importance of the different exporting countries, in their respective propensities to import, or in world demand for their exports). Thus the "unexplained"

export expansion of the United States, Canada, and the Netherlands may be connected with their abnormally low export shares in 1938 and their high rates of population and productivity growth. On the other hand, the unexplained shortfall of exports in Italy may be accounted for by continued dependence on U.S. aid (which made it unnecessary, in 1953, to attain a "normal" level of exports); and the shortfall in Belgium may have been due to some decline in its normal export share associated with the relatively small expansion of output since the prewar period. In France, both the 1938 and the 1953 levels of exports were probably "subnormal," because of heavy unemployment in the former year, and continued dependence on aid in the latter.

To ascribe the tendency toward a restoration of prewar export shares to a gradual removal of abnormalities in the relative export supply conditions of the exporting countries, rather than to any shift in demand conditions in importing countries, is equivalent to ascribing it to a trend toward restoring prewar relativities in export competitiveness. Such a change in export competitiveness must presumably take place in some or all of the ways discussed in earlier sections of this paper.

Clearly, however, the deviations from the prewar trade shares had much less influence upon the development of export shares of these countries in the 1953–54 period than in the 1948–53 period. As can be seen from Table 8, there is little or no correlation between countries' export changes from 1938 to 1953 and those from 1953 to 1954. Even if the doubtful case of West Germany is included, the correlation coef-

TABLE 8. CHANGES IN SHARES OF MANUFACTURED EXPORTS FROM 1938 TO 1953 AND FROM 1953 TO 1954, MAJOR INDUSTRIAL COUNTRIES

(*Weighted*[1] *average ratio = 100*)

| | Ratio of Volume of Mfd. Exports in 1938 to Volume in 1953[2] | Ratio of Volume of Mfd. Exports in 1954 to Volume in 1953[3] |
|---|---|---|
| West Germany | 150 | 115 |
| Italy | 136 | 95 |
| Sweden | 129 | 108 |
| Belgium–Luxembourg | 127 | 100 |
| United Kingdom | 104 | 97 |
| Switzerland | 98 | 93 |
| France | 93 | 102 |
| Canada | 77 | 92 |
| Netherlands | 73 | 108 |
| United States | 70 | 96 |

[1] See Table 7, footnote 2.
[2] The 1938–53 index is arrived at by linking 1938–48 and 1948–53 indices in Table 7. See Table 7, footnote 3.
[3] Indices in this column are also given in Table 6, column 4.

ficient between 1938 and 1954 exports, on a 1953 base, amounts to no more than 0.44, and if West Germany is excluded, the coefficient falls to 0.11. There is only a 60 per cent chance that a positive correlation exists at all.

This result provides some confirmation of the impression derived from the data for the 1948–53 period that by 1953 the tendency toward removing the residual abnormalities in export shares (compared with prewar years) had largely lost its importance, and was likely to be outweighed in future by changes in the normal pattern of export shares as well as by year-to-year disturbing factors.

## Conclusion

For the 1948–53 period, any small proportionate difference between the ratios (1953 over 1948) of the export unit values for any two countries in the group examined tended to be associated with a proportionate difference some 1.7 times as great, but of opposite sign, in the adjusted ratios of their export volumes. For the shorter interval, 1953–54, a small proportionate difference in unit value ratios tended to be associated with a proportionate difference (of opposite sign) in export volume ratios, only some 1.1 times as great.[6] (In this second calculation West Germany was included.) These results imply that a relative cheapening in the manufactured exports of any country in the group tended, even in the short period but to a greater extent in the long period, to raise its share not only in the *volume* but also in the *value* of the aggregate exports of the group. These estimates, however, and especially the second, are subject to a considerable margin of error (specified above) even when they are applied to an "average" exporting country. When applied to any particular country, the likelihood of error would be even greater. Factors other than those taken into account in the calculations have clearly been at work over the periods in question, notably changes in relative competitiveness expressed otherwise than through price changes and, to a lesser extent, changes in the degree of import discrimination.

Subsidiary calculations have been made to test the extent to which the results reflected a tendency to restore prewar trade shares. This tendency was found to be strongly active from 1948 to 1953 but, except for West Germany, negligible from 1953 to 1954.

[6] Professor Brown (*op. cit.*) found an elasticity of substitution of −1.86 for the total export volumes of five European industrial exporters over the interval from 1937 to the third quarter of 1948. This result is not in conflict with our slightly smaller elasticity of −1.7 for the shorter interval from 1948 to 1953.

# APPENDICES

## I. Indices of Volume and Unit Value of Manufactured Exports

1. The indices of the volume of manufactured exports for individual countries used in this study are, with a few exceptions (see 4, 5, and 6, below), those calculated by the Statistical Office of the United Nations on the basis of official or estimated data for the countries in question on the value of manufactured exports and the unit value of manufactured exports.

2. Data on the value of manufactured exports, defined in sections 5 through 8 of the Standard International Trade Classification (SITC), have in general been drawn from national official sources. Official figures based on the SITC classification are not available, however, for any country for 1948 or for Belgium-Luxembourg, Germany, Italy, the Netherlands, and Switzerland for 1950. In these cases, estimates based on the national commodity classifications have been made by the UN Statistical Office. These data have been converted into U.S. dollars by using rates of exchange appropriate to the trade statistics weighted, where necessary, by monthly trade figures.

3. Unit value indices of manufactured exports have been calculated by the UN Statistical Office by converting the official export unit value indices of selected commodity groups into U.S. dollars in the manner described above for export values. The names of the commodity groups selected for the individual countries are listed in United Nations, *Supplement to the Monthly Bulletin of Statistics*, 1954, p. 117. Where there is more than one index covering the manufactured exports of a country, the indices that have been chosen are those which, between them, most nearly represent the content of sections 5 through 8. They have been weighted according to the proportion of that content covered by each index in 1950.

4. For the Netherlands, the index of the volume of manufactured exports has been derived by the UN Statistical Office from the official index, and the unit value index of manufactured exports has been derived from this volume index.

5. For West Germany, the UN Statistical Office index of the volume of manufactured exports does not extend beyond 1950. Therefore, for this study a rough index has been constructed for the period 1948–51 by using the data in UN Economic Commission for Europe, *Economic Survey of Europe Since the War* (Geneva, 1953), p. 300, on the volume of exports of a different classification of commodity groups and linking these data to the UN Statistical Office index on the SITC basis for the period 1951–53.

6. Rough estimates have been made in order to exclude from our calculations U.S. Special Categories exports in the SITC sections 5 through 8, which are included in the values of U.S. manufactured exports published by the United Nations. Data on U.S. Special Categories exports for 1953 and 1954 are from *OEEC Foreign Trade Statistical Bulletin, Series IV*, Jan/Dec 1954 (Paris, July 1955), p. 34; for 1948 and 1950, they have been estimated on the basis of information provided by the U.S. Department of Commerce.

## II. Indices of Wage Costs in Manufacturing Industries

In general, the indices of wage costs in manufacturing industries have been derived as follows: Indices of hourly earnings in manufacturing industries in national currencies have been converted to indices in U.S. dollars by adjusting for changes in exchange rates. Indices of employment in manufacturing industries have been multiplied by hours worked in manufacturing to derive indices of aggregate hours worked. Indices of manufacturing production have been divided by indices of aggregate hours worked to obtain indices of productivity per hour worked. The wage cost indices have been obtained by dividing the indices of hourly earnings in U.S. dollars by the indices of productivity per hour worked.

The data have been obtained from International Monetary Fund, *International Financial Statistics* (*IFS*); United Nations, *Monthly Bulletin of Statistics* (*UN*); and *OEEC General Statistical Bulletin* (*OEEC*).

Certain inevitable divergencies have arisen in the definitions of earnings in manufacturing adopted in different cases. Special difficulties have also arisen for several countries, regarding the data on exchange rates in 1948 or the data on productivity in manufacturing industries.

*Earnings in manufacturing industries*

The definition of earnings in manufacturing industries differs widely from country to country. The data used for each country are described below, with the source used in each case given in abbreviated form in parentheses.

United Kingdom (*OEEC*): Average hourly gross earnings in manufacturing industries including overtime payment, bonuses, etc., but excluding payments in kind and family allowances.

France (*IFS*): Take-home pay of workers in the mechanical and electrical industries in the Paris area, inclusive of family allowances and other social security benefits.

West Germany (*UN*): Average hourly earnings in manufacturing and construction, including overtime pay, piece rates, bonuses, premiums, holiday pay, and family allowances.

Netherlands (*OEEC*): Average hourly gross earnings in coal mining, metallurgy, textiles, and construction before deductions for taxes, social security contributions, etc., and including the value of free rent, board, lodging, and fuel, but excluding bonuses and family allowances.

Belgium (*UN*): Average daily earnings in manufacturing including overtime and incentive pay, premiums, bonuses, and payments in kind. Daily earnings are used instead of hourly earnings because of lack of data on hours worked for use in the construction of the corresponding productivity indices.

Sweden (*UN*): Average hourly earnings in mining and manufacturing, including incentive pay, overtime pay, vacation and sick leave pay, and payments in kind. Despite the lack of data on hours worked for use in the construction of the corresponding productivity indices, hourly earnings have to be used, since no other data are available on earnings.

Italy (*IFS*): The cost to employers of hiring workers, including family allowances and employers' contributions to social security, in industry.

Switzerland (*OEEC*): Hourly wage rates, inclusive of cost of living allowances in manufacturing and building.

Canada (*UN*): Average hourly earnings, including piece rates, overtime pay, incentive pay, and regular bonuses, but excluding payments in kind, in manufacturing.

United States (*UN*): Average gross hourly earnings before deductions, excluding payments of various welfare benefits and pay-roll taxes paid by employers, in manufacturing.

*Exchange rates in 1948*

The exchange rates used to convert earnings in manufacturing from national currencies to U.S. dollars are, in general, *IFS* conversion rates for trade.

Some difficulties were encountered in converting the data for France, West Germany, and Italy, since multiple exchange rates were in effect in these countries in 1948. For West Germany and Italy, "implicit" conversion rates were calculated on the basis of export data in both national currencies and U.S. dollars as supplied by the respective national statistical offices. For France, the procedure suggested by *IFS*, i.e., applying different rates for different periods of the year 1948, has been followed here.

*Productivity in manufacturing industries*

Because of lack of data on hours worked in manufacturing for Sweden and for Belgium-Luxembourg, the indices of manufacturing production for these countries have been divided by indices of employment in manufacturing unadjusted by hours worked. Therefore, for these countries, the indices of productivity used to calculate wage costs refer to productivity per worker employed instead of productivity per hour worked.

Since no index of manufacturing production is available for Switzerland, the wage cost index has been estimated by rough approximation. For 1948–53 the index has been constructed on the assumption of the same change in productivity as in the United Kingdom. (The changes in real per capita income in the two countries are not very different in the period 1948–52, for which data are available in United Nations, *Statistical Yearbook*, 1954, p. 412.) For 1953–54, wage costs in manufacturing are assumed to have changed in the same proportion as the unit value of manufactured exports.

## III. Adjustment for Changes in Commodity Composition of World Demand for Manufactured Exports

1. For each exporting country, a calculation was made of what the value of its manufactured exports would have been in the year under examination if that country had retained its base-year share in the aggregate value of exports by the ten exporting countries in each commodity class.
2. This hypothetical value of exports in the year under examination was expressed as a ratio of the actual value of the country's exports of manufactured goods in the base year.
3. The actual volume index for the country's manufactured exports was divided by this hypothetical ratio to obtain the export volume index adjusted for changes in commodity composition.
4. The resulting index was "normalized," i.e., divided by a weighted average of the similarly adjusted volume indices of the ten exporting countries.

The base years are 1948 for the 1948–53 period and 1953 for the 1953–54 period.

The data required to make these adjustments for the 1953–54 period are available in *OEEC Foreign Trade Statistical Bulletin, Series IV* (*OEEC*). They are values of manufactured exports classified according to the Standard International Trade Classification (SITC). The six commodity classes considered are chemicals (SITC section 5), textiles (SITC division 65), base metals (SITC division 68), machinery (SITC divisions 71 and 72), transport equipment (SITC division 73), and other manufactures (SITC section 6, not elsewhere specified, and section 8). The data used for U.S. exports exclude Special Categories exports.

The 1948–53 period presents more of a problem. The only source that appears to be available for data on the 1948 exports of countries in our group on a uniform commodity classification is *Economic Survey of Europe Since the War*, pp. 300–315 (*ECE*). In that source, exports of individual countries are grouped in ten commodity classes defined in terms of U.K. nomenclature. Of these, the commodity classes considered for this study are metals and manufactures, machinery, transport equipment, chemicals, textiles, and other manufactures. However, since these data do not cover the year 1953, the 1953 data were taken from *OEEC* and converted from the SITC classification to the *ECE* classification, care being taken to ensure maximum comparability. However, some inevitable roughness had to be accepted, notably for Switzerland, Canada, and the United States.

For Switzerland, the 1953 data in the SITC classification are not given in sufficiently fine detail to make possible a good reclassification. In some cases, the official Swiss publication on trade statistics, *Statistique Annuelle du Commerce Extérieur de la Suisse*, was used.

Since *ECE* does not contain data on Canada, it was necessary to reclassify

data on Canada's exports in 1948 from Dominion Bureau of Statistics, *Trade of Canada*, to make them fit into the *ECE* classification.

For the United States, export figures for 1948 in the *ECE* source include Special Categories exports. Exports in these categories were eliminated, with the aid of U.S. Department of Commerce estimates.

## IV. Adjustment for Changes in the Relative Importance of Different Markets for Manufactured Exports

The calculations required to adjust the export volume indices for changes in the geographical structure of world demand for manufactured exports are analogous to those for changes in commodity composition as explained in Appendix III. First, the world was divided into the following ten markets: the United States, Canada, Latin America, continental OEEC countries, OEEC sterling countries, non-OEEC sterling countries, Eastern Europe, British dependencies, French dependencies, and the rest of the world. Then a calculation was made of what the value of each country's exports would have been in the year under examination if that country had retained its base-year share in the value of the group's exports to each market. This was then expressed as a ratio of the actual value of the country's exports of manufactured goods in the base year. The actual volume index of manufactured exports was divided by this ratio to derive an export volume index adjusted for changes in market demands. This index was "normalized" in the manner described in Appendix III.

The data required for adjusting for changes in market structure in the 1953–54 period are available in *OEEC Foreign Trade Statistical Bulletin, Series IV* (*OEEC*).

The adjustment for changes in the 1948–53 period was more difficult, owing to lack of data. The only source giving data on the manufactured exports of the countries in our group to the above markets in 1948 seems to be *Economic Survey of Europe Since the War*, pp. 300–315 (*ECE*). Unfortunately, the data for 1948 from this source are not strictly comparable with those for 1953 from *OEEC*. First, the definitions of "manufactures" are not quite the same. Second, the geographical coverage of the export markets separately specified in the 1948 data from *ECE* is, in a few cases, somewhat narrower than that in the 1953 data from *OEEC*.

In order to use these two sets of data, it had to be assumed that in 1948 the exports of each country, considered to be manufactures according to the SITC classification, were distributed between the above markets in the same proportions as those considered to be manufactures according to the *ECE* classification. It was further assumed that the share of each exporting country in the aggregate manufactured exports of our group to that portion of each market for which information is available is sufficiently indicative of its share in the aggregate exports to the entire market. These assumptions do not appear to be unreasonable, since the discrepancies between the definitions of "manufactures" in the SITC classification and in the *ECE* classification, respectively, are not very large, and since the portions of markets separately specified in the 1948 data were in no case responsible for less than 90 per cent of the over-all value of imports into the corresponding market in 1948.

Two individual cases were found to require special treatment. Since *ECE* gives no data on Canada, data on the destinations of Canada's manufactured exports in 1948 were taken from *Trade of Canada*. Adjustments had to be made to the data in the "fully and chiefly manufactured goods" category published in *Trade of Canada*, based on the known ratios between the SITC manufactured exports and the "fully and chiefly manufactured" exports to the individual markets in 1953.

Data on the 1948 exports of the United States in *ECE* include Special Categories exports. A rough estimate of U.S. Special Categories exports in 1948 was obtained from the U.S. Department of Commerce, and their distribution between the markets in 1948 was assumed to be the same as their known distribution in 1949. These estimated Special Categories exports to the various markets were then eliminated from the *ECE* data for 1948.

# Interest Rates in the Organized Money Markets of Underdeveloped Countries

U Tun Wai*

IN CURRENT DISCUSSIONS of monetary and credit policy, a distinction is often made between its place in the general economic policies of highly developed and of underdeveloped countries. Any generalization about the significance of credit policy either in developed or in underdeveloped countries is indeed likely to require qualification when applied to any particular country. The distinction, however, has sufficient validity to make it worth while to examine carefully some of the characteristics that are usual in the money markets of the underdeveloped countries. It is generally believed that interest rates are much higher in underdeveloped than in developed countries. High interest rates are, indeed, found in developed countries, especially for consumer financing, but the amount of lending at high rates usually is relatively much smaller in developed than in underdeveloped countries. This is one of the contrasts upon which a general examination of the characteristics of money markets in underdeveloped countries should throw some light.

## Size of Organized Money Market

The size of an organized money market in any country may be indicated by either or both of the following ratios, although neither measurement is perfect: the ratio of deposit money to money supply and the ratio of the banking system's claims (mostly loans, advances, and bills discounted) on the private sector to national income. The first ratio may be said to represent "the liquidity preference" approach, and the second ratio "the loanable funds" approach. The first ratio views matters from the liability side of the balance sheet of the banks, and the second from the asset side.

The ratio of deposit money to money supply actually measures banking development rather than the development of the money market. However, to the extent that the development of commercial banking is

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synonymous with the development of the money market, this ratio may be used as an indicator of the growth of a money market. In most underdeveloped countries, there are hardly any lending agencies of importance other than commercial banks. There are no discount houses or acceptance houses, and savings institutions (including life insurance companies) are in the early stages of development. In many countries of the ECAFE region, commercial banks in 1950 supplied 70 to 90 per cent of the short-term loanable funds in the organized money markets, inclusive of loans made by governments.[1]

Both ratios might be expected to be low in an underdeveloped country and high in a developed one. The ratio of deposit money to money supply should be higher in a more developed country because, with economic development, there is also development of the banking system. The greater use of banks for settlement of debts, the use of checking accounts instead of currency as a medium of exchange, and the extension of borrowing from the banking system tend to increase the importance of deposit money.

As an economy develops, the size of the typical business and industrial unit is likely to expand; the amount of self-financing tends to decline, and greater use is made of the money market to finance business operations. The net result is that the claims (loans, advances, and investments) of the banking system on the private sector tend to increase more rapidly than national income; thus the second ratio is also likely to increase. When an economy reaches a very advanced stage, the size of the typical business enterprise may grow to such an extent that more and more of the funds required to run it will be financed internally rather than from the market. But even in such a situation, any decline in bank loans to industry for investment may be partly offset by loans to consumers for financing private consumption.

A comparison, for a number of developed and underdeveloped countries, of the two ratios for a period of years (Tables 1 and 2) broadly confirms the expectations noted above. For estimating the size of the money market, however, use of the ratio of deposit money to money supply by itself may be misleading. For example, this ratio is almost as high in some of the Latin American countries as in the most highly developed countries. A possible explanation may be that, while the money markets are fairly large in some Latin American countries, they may not be functioning as efficiently as in the more developed countries.

[1] See Economic Commission for Asia and the Far East, *Economic Survey of Asia and the Far East, 1950* (New York, 1951), pp. 468–69. The percentages of total short-term loanable funds supplied by commercial banks in 1950 are estimated to be 72 per cent in Burma, 78 per cent in India, 73 per cent in Japan, 94 per cent in Malaya (1949), 79 per cent in Pakistan, 95 per cent in the Philippines, and 91 per cent in Thailand (1947).

TABLE 1. DEPOSIT MONEY AS PER CENT OF MONEY SUPPLY, SELECTED DEVELOPED AND UNDERDEVELOPED COUNTRIES[1]

| | 1913 | 1921 | 1929 | 1938 | 1948 | 1953 |
|---|---|---|---|---|---|---|
| DEVELOPED COUNTRIES | | | | | | |
| France | 49 | 31 | 32 | 42 | 54 | 50 |
| Netherlands | 34 | 44 | 31 | 59 | 57 | 60 |
| Switzerland | 78 | 72 | 66 | 80 | 57 | 61 |
| United Kingdom | 96 | 82 | 67 | 73 | 76 | 72 |
| United States | 80[2] | 81 | 78 | 82 | 77 | 79 |
| UNDERDEVELOPED COUNTRIES | | | | | | |
| Latin America | | | | | | |
| Argentina | 64[3] | 71[3] | 49 | 50 | ... | ... |
| Bolivia | 36 | 43 | 27 | 37 | 40 | 35 |
| Brazil | 35 | 51 | 51 | 70 | 65 | 69 |
| Chile | 54 | 63 | 57 | 66 | 67 | 66 |
| Colombia | ... | 45[4] | 44 | 43 | 51 | 57 |
| Costa Rica | 38[5] | 28[5] | ... | 53 | 38 | 52 |
| Cuba | ... | ... | ... | 62 | 44 | 33[7] |
| Dominican Republic | ... | ... | ... | 65 | 57 | 51 |
| Ecuador | 27 | 41 | 41 | 44 | 47 | 50 |
| El Salvador | ... | 10 | ... | 26 | 33 | 44 |
| Guatemala | 23[3] | 11[3] | ... | 37 | 35 | 34 |
| Honduras | 38[3] | ... | ... | 43[3] | 57[8] | 42 |
| Mexico | ... | ... | 44 | 31 | 46 | 50 |
| Nicaragua | 10 | 22 | ... | 49 | 46 | 52 |
| Peru | ... | 54 | 51 | 54 | 60 | 60 |
| Uruguay | ... | 42 | 34 | 30 | 48 | 44 |
| Venezuela | 48 | 27 | 49 | 51 | 43 | 56 |
| Asia | | | | | | |
| Burma | ... | ... | ... | ... | 34 | 39 |
| Ceylon | ... | ... | ... | 73 | 60 | 59 |
| India[9] | 53[9,10] | 42[9,10] | 51[9,10] | 45 | 35 | 33 |
| Indonesia | ... | ... | ... | 43[10] | 48 | 32 |
| Japan | ... | ... | 59 | 62 | 45 | 58 |
| Malaya | ... | ... | ... | ... | 67 | 56 |
| Pakistan | ... | ... | ... | ... | 37 | 34 |
| Philippines | ... | ... | ... | 34 | 50 | 40 |
| Thailand | ... | ... | ... | 23 | 23 | 26 |
| Middle East | | | | | | |
| Egypt | ... | ... | ... | 51[11] | 56 | 45 |
| Iran | ... | ... | ... | 54 | 49 | 54 |
| Iraq | ... | ... | ... | 25 | 30 | 35 |
| Israel | ... | ... | ... | 74 | 62 | 60 |
| Lebanon | ... | ... | ... | 48[11] | 51 | 61 |

Sources: In general, the percentages for 1913, 1921, and 1929 are based on data from the following League of Nations publications: *Money and Banking, 1939–40*, Vol. I, *Monetary Review* (Geneva, 1940); *Memorandum on Currency and Central Banks, 1913–25*, Vol. II (Geneva, 1926); and *Memorandum on Commercial Banks, 1913–29* (Geneva, 1931). Those for 1938, 1948, and 1953 are based on data from *International Financial Statistics* (Washington). Exceptions are Argentina and Uruguay, 1938, for which the League of Nations sources given above have been used; Malaya, all years, for which percentages are based on data from Registrar of Malayan Statistics, *Malayan Statistics Monthly*; and India, currency in circulation, 1913 and 1921, for which figures have been obtained from Reserve Bank of India, *Report on Currency and Finance for the Year 1953–54* (Bombay, 1954), and *Banking and Monetary Statistics of India* (Bombay, 1954).

[1] End of year data unless otherwise noted. For definition of deposit money and money supply, see *International Financial Statistics* (Washington). For 1913, 1921, and 1929, deposit money is measured by sight deposits of commercial banks, which added to notes in circulation are taken to approximate the money supply.

[2] For deposit money, the year 1914 has been used.

[3] Total deposits with commercial banks have been used for deposit money.

[4] For notes in circulation, the year 1923 has been used, and for deposit money, the year 1925.

[5] Data for notes in circulation are for October 1914.

[6] Data for notes in circulation are for October 1921.

[7] Data are for 1952.

[8] Government deposits are included in deposit money.

[9] Figures for currency in circulation for 1913, 1921, and 1929 are estimates.

[10] March data.

[11] Based on 1939 data.

TABLE 2. BANKING SYSTEM'S CLAIMS ON PRIVATE SECTOR AS PER CENT OF NATIONAL INCOME, SELECTED DEVELOPED AND UNDERDEVELOPED COUNTRIES[1]

| | 1938 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 |
|---|---|---|---|---|---|---|---|
| **DEVELOPED COUNTRIES** | | | | | | | |
| Australia | ... | 24 | 23 | 21 | 25 | 22 | 23 |
| Belgium-Luxembourg | ... | ... | 12 | 15 | 14 | 15 | 15 |
| Canada | 23 | 21 | 20 | 22 | 20 | 20 | 22 |
| Denmark | 81 | 63 | 61 | 60 | 54 | 54 | 56 |
| France | ... | 16 | 18 | 19 | 21 | 22 | 24 |
| Germany | ... | ... | ... | 28 | 29 | 34 | 41 |
| Italy | ... | 20 | 25 | 27 | 27 | 33 | 36 |
| Netherlands | ... | 15 | 15 | 14 | 15 | 16 | 16 |
| New Zealand | 30[2] | 20 | 18 | 19 | 26 | 22 | 19 |
| Norway | 58[2] | 41 | 45 | 47 | 44 | 44 | 48 |
| Sweden | 34[2] | ... | 33 | 34 | 30 | 28 | 27 |
| Switzerland | 171[2] | 93 | 98 | 100 | 98 | 99 | 101 |
| United Kingdom | 19 | 10 | 14 | 17 | 13 | 12 | 13 |
| United States | 29 | 20 | 21 | 23 | 22 | 23 | 23 |
| Union of South Africa | ... | 20 | 14 | 13 | 19 | 17 | 17 |
| **UNDERDEVELOPED COUNTRIES** | | | | | | | |
| Latin America | | | | | | | |
| Chile | ... | 18 | 20 | 17 | 17 | 15 | 16 |
| Colombia[3] | ... | 14 | 13 | 14 | 15 | 16 | 15 |
| Cuba | ... | 13[4] | 14[4] | 18 | 20 | 24 | 25 |
| Dominican Republic | ... | ... | ... | 5 | 7 | 6 | 7 |
| Ecuador | ... | ... | ... | 11 | 11 | 11 | 13 |
| Guatemala[4] | 6 | ... | 3 | 2 | 2 | 2 | 3 |
| Honduras | 5[2] | 6 | 7 | 7 | 5 | 7 | ... |
| Mexico | 8[5] | 9 | 7 | 7 | 8 | 8 | 10 |
| Nicaragua | ... | ... | ... | 10 | ... | ... | ... |
| Panama | ... | 11 | 11 | 11 | 10 | 10 | ... |
| [illegible]ay | ... | ... | ... | 8 | ... | 9 | ... |
| Peru | ... | 16 | 15 | 15 | 16 | 18 | 19 |
| Venezuela | ... | ... | 10 | 11 | 12 | 12 | ... |
| Asia | | | | | | | |
| Burma | ... | 3 | 2 | 4 | 5 | 4 | 4 |
| Ceylon | ... | 3 | 3 | 3 | 4 | 4 | 4 |
| India | ... | 5 | 5 | 5 | 6 | 6 | 5 |
| Indonesia | ... | ... | ... | ... | 3 | 3 | ... |
| Japan | 58 | 21 | 26 | 31 | 36 | 42 | 47 |
| Malaya | ... | 11 | 15 | 12 | ... | ... | ... |
| Pakistan | ... | ... | ... | 5 | 5 | 4 | 4 |
| Philippines | ... | 9 | 9 | 8 | 10 | 9 | 10 |
| Thailand | ... | 3 | 3 | 3 | 4 | 6 | ... |

Sources: Based on data from *International Financial Statistics* (Washington); Government of India, Department of Economic Affairs, *Final Report of the National Income Committee* (Calcutta, 1954); Registrar of Malayan Statistics, *Malayan Statistics Monthly*; and F. C. Benham, *The National Income of Malaya, 1947–49* (Singapore, 1951).

[1] Claims include those which the central banks have on the private sector; data pertain to end of year. National income is for calendar year with the following exceptions: India, Pakistan, and New Zealand, year beginning April 1; Japan, calendar year for 1938 and year beginning April 1 for 1948–53; Australia and Union of South Africa, year beginning July 1; and Burma, year beginning October 1.

[2] Based on 1937 data.

[3] Negligible amounts of claims on Government are included prior to 1952.

[4] Claims on Government are included.

[5] Based on 1939 data.

Judging by the first ratio, the money markets in Brazil, Chile, Colombia, and Peru are relatively the largest in Latin America; the only substantial markets in Asia are in Ceylon, Malaya,[2] and Japan.[3] According

[2] The case of Malaya is deceptive as it is really only Singapore that has a fairly large money market. In the Federation of Malaya, money markets are very small.

[3] Strictly speaking, Japan is not an underdeveloped country. But neither is it

to the second criterion, the size of the money market is significant in Chile, Colombia, Cuba, and Peru in Latin America, and only in Japan in Asia. Only in Japan do both ratios approximate those prevailing in developed countries. In relation to the whole economy, money markets are quite small in Burma, India, Indonesia, Pakistan, and Thailand among the Asian countries and in Bolivia, the Dominican Republic, Guatemala, and Honduras in Latin America.

In Table 1 an attempt has also been made to measure the relative growth of money markets. The data used, however, are subject to a number of limitations. In the League of Nations data on the currency component of money supply which are used for the earlier years, notes in circulation are included rather than currency in circulation. Furthermore, the League's statistical coverage of commercial banks was incomplete. In some cases, where separate data for sight deposits were not available, total deposits were used as the equivalent of deposit money. In spite of these limitations the record gives a broad picture of the development of money markets in underdeveloped countries. In Brazil, Colombia, Ecuador, El Salvador, Nicaragua, and Peru, there appears to have been a growth in the relative size of the money market over the last four decades. Long-term series are not available for Asian countries except India and Japan. In Japan, the money market had already been fairly well developed by the turn of the century; in India, the data for 1929 and earlier years are not reliable because total deposits have been used for deposit money and the currency component of money supply is an estimate.

## Level and Structure of Interest Rates

The structure of interest rates in the organized money markets of underdeveloped countries is usually more or less the same as in the developed ones. The short-term rate of interest is generally much below the long-term rate, as indicated by the spread between the government treasury bill rate and the government bond yield; the rate at which bills of exchange are discounted is also lower than the rate at which loans and advances are granted.

The lowest market rates are usually the call loan rates between commercial banks.[4] The next lowest are those paid by commercial banks on

as developed as the United Kingdom, the United States, or Western Europe (judging by per capita income). Japan is included in this study partly because of its recent growth and partly because many of its problems are similar to those of the underdeveloped countries of Asia and Latin America.

[4] In most countries there are no discount houses supplying funds at call to commercial banks.

short-term deposits, followed by the government treasury bill rate. Then come the rates at which commercial banks discount commercial paper, varying according to the type of security and the date of maturity. In most countries, especially in Asia, the government bond yield comes next, followed by the lending rates of commercial banks (Table 3).

In the absence of adequate data, the government bond yield for a

TABLE 3. STRUCTURE OF INTEREST RATES, SELECTED COUNTRIES, 1954[1]

*(In per cent)*

| | Call Money | Treasury Bills | Three-Month Deposits[2] | One-Year Deposits[2] | Government Bond Yields[3] | Market Discount Rate | Commercial Bank Advances[2, 4] | Weighted Average, All Commercial Bank Loans | Central Bank Rate |
|---|---|---|---|---|---|---|---|---|---|
| **Latin America** | | | | | | | | | |
| Brazil | ... | ... | ... | 6.0* | 6.26 | ... | ... | 12* | 8.0 |
| Chile | ... | ... | ... | ... | 8.36 | ... | ... | 12.3 | 8.0 |
| Colombia | ... | ... | ... | ... | 6.85 | ... | ... | ... | 4.0 |
| Costa Rica | ... | ... | ... | ... | ... | ... | ... | ... | 4.0 |
| Cuba | ... | ... | ... | ... | 3.83 | ... | ... | 4–12* | ... |
| Ecuador | ... | ... | 4* | 6* | ... | ... | ... | 10* | 10.0 |
| El Salvador | ... | ... | ... | ... | ... | ... | ... | ... | 3.0 |
| Guatemala | ... | ... | ... | ... | ... | ... | ... | 9* | 6.0 |
| Honduras | ... | ... | ... | ... | ... | ... | ... | ... | 2.0 |
| Mexico | ... | ... | ... | ... | ... | 10.41 | ... | ... | 4.5 |
| Nicaragua | ... | ... | ... | ... | ... | ... | ... | ... | 6.0 |
| Peru | ... | ... | ... | ... | 8.05 | ... | ... | ... | 6.0 |
| Uruguay | ... | ... | ... | ... | 5.70 | 6.25[5] | 7[5] | ... | 3.5[5] |
| Venezuela | ... | ... | ... | ... | ... | ... | ... | ... | 2.0 |
| **Asia** | | | | | | | | | |
| Burma | 1 | 1.1 | 0.25–2 | 0.75–3 | 3[6] | ... | 4–8 | ... | 3.0 |
| Ceylon | 0.88–1.67 | 1.69 | 0.75–1.5 | 1.25–2 | 3.79 | 3–6.5[5] | 3–5 | ... | 2.5 |
| India | 2.43 | 2.57 | 2.88 | ... | 4.05 | ... | 3.06–5.75 | ... | 3.5 |
| Indonesia | ... | ... | ... | ... | 5.92 | 3–6[7] | 3[7] | ... | 3.0 |
| Japan | 7.85 | ... | 4.0* | 6.0* | 6.48 | 8.79 | 10.22[8] | ... | 5.84 |
| Pakistan | 1.3 | ... | 0.75–2.5 | 1.5–3.25 | 3.14 | ... | 3–6 | ... | 3.0 |
| Philippines | ... | ... | ... | ... | ... | ... | ... | 6.31[9] | 1.5 |
| Thailand | ... | 2.30 | ... | ... | ... | ... | ... | ... | 7.0 |
| **Middle East** | | | | | | | | | |
| Egypt | ... | 0.9[9] | ... | ... | 3.42[9] | ... | ... | ... | 3.0 |
| Iran | ... | ... | 2[10] | 4[10] | ... | 7–8[10] | ... | ... | |
| Lebanon | ... | ... | ... | ... | ... | 5.48 | ... | ... | |

Sources: *International Financial Statistics* (Washington); Union Bank of Burma, *Bulletin*; Reserve Bank of India, *Trend and Progress of Banking in India, 1953*; Bank Indonesia, *Report for the Year 1953–54*; Bank of Japan, *Economic Statistics Monthly*; Central Bank of the Philippines, *Annual Report, 1953*; Bank of Thailand, *Current Statistics*; Banco Central del Ecuador, *Boletin*; Banco de Guatemala, *Boletin Estadistico*; B. H. Beckhart, *Banking Systems* (New York, 1954).

[1] Annual averages. The rates are free market rates prevailing in the main money center; e.g., for India, rates in Bombay. Where the rate is the legal maximum, it is so designated by an asterisk (*).

[2] As of end of year.

[3] Yield on long-term government bonds. Brazil, yield of dollar bonds in New York, 3½'s of 1979; Ceylon, 3's of 1965–70; Chile, dollar bonds in New York, 3's of 1993; Colombia, dollar bonds in New York, 3's of 1970; Cuba, dollar bonds in New York, 4½'s of 1977; Egypt, 3.25's of 1973; India, 3's of 1966–68; Indonesia, 3's of 1991; Japan, weighted yield (simple interest) to latest redemption date of medium-dated government bonds; Pakistan, 3's of 1968; Peru, weighted yield on perpetual bonds; Uruguay, 5's of 1974.

[4] Against government securities and gilt-edged securities.

[5] March 1952 rates.

[6] Rate at which five-year bonds are available on tap.

[7] Rates of Bank Indonesia, July 1953.

[8] Rate on loans against deeds.

[9] 1953 rates.

[10] Rates of Bank Melli Iran.

TABLE 4. GOVERNMENT BOND YIELDS, SELECTED COUNTRIES[1]

*(In per cent)*

| | 1937 | 1938 | 1939 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 |
|---|---|---|---|---|---|---|---|---|---|---|
| World Markets | | | | | | | | | | |
| Netherlands | 3.02 | ... | ... | 3.27 | 3.27 | 3.28 | 3.88 | 3.95 | 3.43 | 3.31 |
| United Kingdom | 3.28 | 3.38 | 3.72 | 3.21 | 3.30 | 3.54 | 3.78 | 4.28 | 4.08 | 3.75 |
| United States | 2.74 | 2.61 | 2.41 | 2.44 | 2.31 | 2.32 | 2.57 | 2.68 | 2.92 | 2.53 |
| Latin America | | | | | | | | | | |
| Brazil | 20.05[2] | ... | ... | 8.20 | 6.99 | 6.56 | 6.08 | 7.03 | 6.64 | 6.26 |
| Chile | 3.64 | ... | ... | 3.58 | 10.95 | 8.58 | 7.78 | 8.40 | 8.65 | 8.36 |
| Colombia | 8.73 | 8.92 | 8.17 | 7.13 | 6.61 | 6.49 | 6.58 | 6.34 | 6.33 | 6.28 |
| Cuba[3] | 7.78 | ... | ... | 3.85 | 3.83 | 3.79 | 3.85 | 3.78 | 3.67 | 3.83 |
| Peru | 7.99 | 8.24 | 9.09 | 6.94 | 7.11 | 7.37 | 7.43 | 7.42 | 8.12 | 8.05 |
| Uruguay | 5.09 | 5.39 | 5.36 | 5.17 | 5.48 | 5.46 | 5.35 | 5.69 | 5.64 | 5.70 |
| Asia | | | | | | | | | | |
| Ceylon | ... | ... | ... | 2.94 | 3.01 | 3.04 | 2.79 | 2.93 | 3.72 | 3.79 |
| India | 3.26 | 3.20 | 3.56 | 2.97 | 2.99 | 3.02 | 3.42 | 3.89 | 3.95 | 4.05 |
| Indonesia | ... | ... | ... | ... | ... | ... | 9.37 | 8.25 | 6.36 | 5.92 |
| Japan | ... | ... | ... | 5.02 | 5.51 | 5.50 | 5.50 | 5.50 | 6.36 | 6.48 |
| Pakistan | ... | ... | ... | ... | 2.98 | 2.98 | 2.99 | 2.98 | 3.06 | 3.14 |
| Middle East | | | | | | | | | | |
| Egypt | 3.71 | 3.89 | 5.53 | 2.80 | 3.09 | 3.10 | 3.50 | 3.98 | 3.42 | 3.11 |

Sources: Data for Japan are from Bank of Japan, *Economic Statistics of Japan*; all other data are from *International Financial Statistics* (Washington).

[1] Annual averages. Long-term bonds in most cases. Prewar and postwar bonds are, in general, not the same. For a full description of the bonds, see *International Financial Statistics* and notes to Table 3.

[2] 6½ per cent bonds of 1926–57 replaced under the Readjustment Plan of 1944.

[3] More or less short-term bonds; although the bonds are 4½'s of 1977, they are callable at par on any interest date (June 30 and December 31) on 60 days' notice, or for sinking fund on 30 days' notice. Since 1948, prices have been above call and yield to next call has been negative.

number of countries listed in Tables 3 and 4 is the yield on bonds floated in foreign currencies in foreign centers. Such yields, it is true, may not accurately reflect the level of long-term interest rates in the domestic money markets. But insofar as government bonds floated in foreign centers are bought and sold in the domestic money market, there should be a close relation between the two yields. Thus, for example, in 1954, the yield on Japanese Government bonds that had been floated in New York was 7.27 per cent, while the yield on bonds floated in Tokyo was 6.48 per cent. There was, however, a considerable disparity between the yield on Indonesian Government bonds floated in Amsterdam before the war (3.16 per cent in 1954) and the yield on bonds floated in Indonesia in 1950 (5.92 per cent in 1954). This difference arose because the former bonds were fully guaranteed by the Netherlands Government.

Within each category of interest rate there are differences of many kinds. The rates at which commercial banks lend vary according to the size of the loan,[5] the type of borrower, and the collateral offered. As in more highly developed countries, the larger the loan the lower is the rate of interest charged. On better security, such as government bonds, rates

[5] For example, in India the Imperial Bank of India's call loan rate since 1952–53 has been 3¾ per cent on loans below 500,000 rupees and 3½ per cent on loans of 500,000 rupees or more.

of interest are low, and the lowest rate is sometimes—for example, in Ceylon—even lower than the government bond yield. In most cases, however, the minimum rate at which commercial banks lend against government securities is a little higher than the government bond yield. The commercial banks charge higher rates as the type of collateral becomes less liquid; thus, the rates on stock exchange securities will be more than on government bonds, and the rates on stocks of merchandise higher still. The highest rates are on loans with no collateral. Commercial banks take into account the creditworthiness of their customers as well as the collateral offered; for this reason many of the commercial bank lending rates against government securities are quoted in Table 3 between maximum and minimum rates. It is quite possible for a person with "inferior" collateral but a good credit standing to obtain loans at cheaper rates than another person with very good collateral. For example, in Pakistan, during 1954, rates for clean advances (i.e., without collateral) varied from 2¾ per cent to 9 per cent per annum, compared with 3½ per cent to 6½ per cent for advances against jute merchandise.

In general, the level of interest rates in underdeveloped countries, even in organized money markets, is higher than in the more developed countries.[6] The more notable difference between the two groups of countries, however, is that the range of interest rates is generally much wider in underdeveloped countries. The volume of loans granted at relatively low rates in an underdeveloped country is not very important, as only limited amounts of financial assets are available to serve as collateral for lending at low rates. It is usually the foreign business firms with longer experience and larger capital which are able to borrow at the lower rates. Most of the indigenous firms have to pay the higher rates; this is especially true where foreign banks occupy an important position in the banking system, and the minimum rates quoted in Table 3 are in practically every case rates charged by foreign banks.

The level of interest rates in the organized money markets in Latin America is generally somewhat higher than in Asia. This is true not only of government bond yields,[7] which are shown in Table 4, but also of cen-

[6] There are, however, important exceptions. The rates in Bombay are only a shade higher than in London, and at times certain rates have even been lower. From 1948 through 1953, the government bond yield in India was lower than in the United Kingdom. The reason was that in India the open market operations of the Reserve Bank of India kept the government bond yield artificially low while in the United Kingdom it was allowed to rise.

[7] Especially for a comparison between interest rates in underdeveloped countries, government bond yields are not the most suitable indicator, because different monetary policies and the support of the government bond markets by the central banks may influence government bond yields without necessarily influencing other rates. Furthermore, bond yields are also influenced by the financial position of governments in underdeveloped countries. However, the general level of bond yields, when compared over a long period, can be informative.

tral bank rates[8] and of market discount rates, where data are available. Thus, for example, in 1954, the market discount rate in Colombo was between 3 per cent and 6½ per cent per annum, while in Mexico it was as high as 10.41 per cent. Cuba's low government bond yield shown in Table 4 is more apparent than real, because the bonds are callable at par on any interest payment date (June 30 and December 31) on 60 days' notice or for sinking fund on 30 days' notice, thus making the yield resemble a short-term rate like the treasury bill rate. Of the Asian countries listed in Table 4, Indonesia and Japan are exceptions to the general pattern of low government bond yields in Asia, which compares quite well with the yields of government bonds of the United Kingdom, the United States, and the Netherlands.

The high government bond yields in Latin American countries stem partly from the greater political uncertainty in that area and also from the general inflations of the past. On the other hand, the close political and economic ties between countries in Asia and either the United Kingdom or the Netherlands have enabled the Asian countries to float low-interest government bonds not only in the U.K. and Netherlands capital markets but also in their own markets. Latin American countries are also generally more developed than those of Asia (except Japan), and thus have a greater demand for investment funds without having fully developed capital markets to supply adequate finance for both private investment and government bonds at low rates of interest. Japan, though more developed, resembles the countries of Latin America in many respects, such as a large demand for investment funds and the inflationary heritage which causes high interest rates. In addition, Japan's organized money markets are effectively linked to the demand and supply of loanable funds in rural areas, which have lowered rural rates of interest but raised the rates in the main money centers.

The lower market discount rate and the lower rate on advances and overdrafts in Asia are due mainly to the greater importance of foreign exchange banks in the banking systems of Asia. These banks, by their access to world money markets, are able to charge relatively low rates of interest on loans and discounts. Even in Asia, the interest rates in the organized money markets of Korea, Japan, and Thailand are higher than in other Asian countries partly because in Japan and Thailand foreign banks play a minor role in the supply of loanable funds and in Korea because of the inflationary conditions.

[8] In 1954, the central bank rates in Asia ranged between 1.5 per cent (the Philippines) and 7 per cent (Thailand); in Latin America, they ranged between 2 per cent (Honduras and Venezuela) and 10 per cent (Ecuador). For data by countries, see Table 3.

## Influence of Central Bank Rate

Central banks have been established in most underdeveloped countries; in Latin America for the most part they were established in the twenties and thirties, whereas in Asia, except in India, Japan, and Thailand, they are of postwar origin. The statutes of a number of central banks in Asia (for example, Burma and Ceylon) have granted them wide powers including that of control over the rates at which commercial banks may grant loans, but these powers have not so far been exercised. Where central bank lending to commercial banks is substantial, one would naturally expect changes in the bank rate to be reflected immediately in market rates. Where such lending is nominal, the influence would be felt directly only if marginal lending should influence the market rate.

In most underdeveloped countries, central bank lending to commercial banks is not of any great consequence. In nine countries, Bolivia, Burma, Ceylon, India, Indonesia, Israel, Mexico, Panama, and Thailand, there has been practically no lending; and in nine others, Brazil, Cuba, Egypt, Honduras, Japan, Pakistan, the Philippines, Uruguay, and Venezuela, it has been equal to about 10 per cent or less of the claims which commercial banks have on the private sector. In some Latin American countries and Turkey, central bank lending to commercial banks has been of great importance; in Chile, Colombia, Ecuador (development banks), and Turkey it has been equal to about one fourth, and in Costa Rica, El Salvador, Guatemala, and Nicaragua to about one third to one half, of the claims which commercial banks have on the private sector. Only in Paraguay has it exceeded the volume of those claims (Table 5). For most of those countries where central bank lending to commercial banks has been large, and also in Japan, the volume of such lending has even exceeded the balances maintained by the commercial banks with the central banks.

In spite of the small direct dependence of commercial banks on the central banks for funds, the latter are able to influence market rates by changes in the bank rate because of their economic, and at times their legal, position in the domestic money market, with wide powers for selective credit control, open market operations,[9] and moral pressures. The postwar changes in the bank rate occurred mainly during the few years following the outbreak of the Korean conflict. The influence of central bank rates may not be accurately indicated by comparing commercial bank lending rates and other rates in organized money markets immediately before and after the central bank rate is changed. This is especially

[9] The amount of government securities held by commercial banks before the war was negligible; but with the postwar growth of bank holdings (central and commercial) of government securities, this has become an important weapon of control in a number of underdeveloped countries, such as Ceylon and India.

TABLE 5. CENTRAL BANK LOANS TO COMMERCIAL BANKS IN RELATION TO (a) COMMERCIAL BANKS' CLAIMS ON PRIVATE SECTOR AND (b) COMMERCIAL BANKS' BALANCES WITH PRIVATE BANKS, SELECTED COUNTRIES, 1938 AND 1948-54[1]

*(In per cent)*

| | | 1938 | 1948 | 1949 | 1950 | 1951 | 1952 | 1953 | 1954 |
|---|---|---|---|---|---|---|---|---|---|
| Brasil | a | ... | 7 | 5 | 7 | 10 | 11 | 13 | 12 |
| | b | ... | 53 | 57 | 65 | 78 | 70 | 96 | 85 |
| Chile | a | 3 | 11 | 13 | 11 | 12 | 13 | 17 | 20 |
| | b | ... | ... | ... | ... | ... | ... | ... | ... |
| Colombia | a | 18 | 29 | 31 | 31 | 29 | 29 | 25 | 21 |
| | b | ... | 184 | 228 | 309 | 247 | 185 | 181 | 122 |
| Costa Rica | a | 1 | 45 | 49 | 43 | 36 | 33 | 31 | 31 |
| | b | 14 | 767 | 1,513 | 712 | 387 | 364 | 392 | 386 |
| Cuba | a | ... | ... | ... | 1 | 2 | 12 | 7 | 10 |
| | b | ... | ... | ... | 1 | 4 | 23 | 13 | 23 |
| Dominican Republic | a | ... | ... | ... | ... | ... | ... | 17 | 14 |
| | b | ... | ... | ... | ... | ... | ... | 89 | 36 |
| Ecuador Private banks | a | 4[2] | 7 | 7 | 3 | 3 | 2 | 2 | 2 |
| | b | 22[2] | 24 | 32 | 11 | 11 | 7 | 6 | 8 |
| Ecuador Development banks | a | 25[2] | 13 | 45 | 24 | 20 | 21 | 22 | 21 |
| | b | 175[2] | 175 | 746 | 346 | 538 | 286 | 744 | 847 |
| Egypt | a | ... | 2 | 6 | 11 | 13 | 4 | 3 | ... |
| El Salvador | a | 6[2] | 16 | 12 | 19 | 27 | 30 | 25 | 33 |
| | b | 170[2] | 101 | 66 | 154 | 258 | 211 | 188 | 273 |
| Guatemala | a | ... | 24 | 23 | 23 | 23 | 32 | 33 | 32 |
| | b | ... | 49 | 65 | 61 | 68 | 99 | 84 | 95 |
| Honduras | a | ... | ... | ... | 8 | 6 | 2 | 6 | 6 |
| | b | ... | ... | ... | 28 | 12 | 8 | 25 | 15 |
| India | a | ... | 4 | 2 | 1 | 3 | 2 | 2 | 4 |
| | b | ... | ... | ... | ... | 41 | 33 | 33 | 52 |
| Japan | a | 3 | 11 | 11 | 13 | 13 | 4 | 6 | 8 |
| | b | 231 | 1,005 | 2,872 | 3,753 | 5,688 | 3,914 | 9,175 | 11,589 |
| Nicaragua | a | ... | 55 | 42 | 41 | 51 | 43 | 42 | 46 |
| | b | ... | 284 | 236 | 241 | 379 | 315 | 385 | 906 |
| Pakistan[3] | a | ... | ... | 5 | 12 | 15 | 9 | 5 | 19 |
| | b | ... | ... | 10 | 99 | 98 | 81 | 41 | 162 |
| Paraguay | a | ... | 139 | 150 | 148 | ... | 52 | ... | ... |
| | b | ... | ... | ... | ... | ... | ... | ... | ... |
| Peru | a | 11 | 10 | 12 | 13 | 9 | 10 | 18 | 16 |
| | b | 75 | 68 | 114 | 146 | 79 | 86 | 159 | 139 |
| Philippines | a | ... | ... | 8 | 2 | 6 | 7 | 3 | 2 |
| | b | ... | ... | ... | ... | 44 | 40 | 18 | 17 |
| Turkey | a | ... | 19 | 22 | 17 | 17 | 21 | 18 | 29 |
| | b | ... | 683 | 1,666 | 1,010 | 306 | 569 | 627 | 504 |
| Uruguay | a | 3 | 5 | 3 | 4 | 4 | 6 | 5 | 11 |
| | b | ... | ... | ... | ... | ... | ... | 57 | 210 |
| Venezuela | a | ... | 7 | 4 | 7 | 8 | 5 | 4 | 8 |
| | b | ... | 27 | 18 | 43 | 33 | 24 | 28 | 72 |

Sources: Based on data from *International Financial Statistics* (Washington).
[1] Data as of end of year.
[2] 1937 data.
[3] Claims on private sector include only loans.

true when central bank rates have been changed because of a change in market rates rather than with a view to influencing them. In Japan, the Bank of Japan raised its discount rate on October 1, 1951, from 5.11 per cent to 5.84 per cent. The higher bank rate immediately caused all other money market rates to rise by more or less corresponding amounts. In India, the Reserve Bank of India raised its bank rate from 3 per cent to 3½ per cent on November 15, 1951, and the lending rates of commercial banks increased by ½ per cent, in spite of the fact that market rates had already risen significantly during the second half of 1950 and early 1951. In India, the movement of the central bank rate, therefore, both followed and led a corresponding movement of market rates.

In Ceylon, when money conditions became tight as economic activity fell sharply from the high level reached as a result of the Korean conflict, the commercial banks offered higher rates of interest on deposits,[10] but their lending rates, which had not been changed during the period of high economic activity, were maintained at the same level. When, however, on July 23, 1953, the central bank raised its bank rate, i.e., the rate at which it makes advances to the commercial banks against the pledge of government securities, from 2.5 per cent to 3.0 per cent per annum, the whole lending rate structure of the commercial banks rose by about the same amount and the maximum rate for interbank call loans rose by more than 1 per cent. This occurred in spite of the fact that the central bank does not usually lend to the commercial banks and its lending which began in the second half of 1953 and in early 1954 was small.[11] When the central bank rate was lowered to 2½ per cent on June 12, 1954, the commercial bank lending rates hardly changed. This seems to indicate both that, when the trend is downward, market rates are rather sticky, and that commercial banks were waiting for a signal from the central bank before they raised their lending rates in 1953.

In Chile, the central bank discount rate was raised from 6 per cent to 8 per cent in March 1951, but its rediscount rate remained unchanged at 4.5 per cent. Monthly data on market rates of interest are not available, but the weighted six-month average rate charged by all banks on all loans was stable in the first half of 1950. When activity rose during the Korean conflict, this weighted average market rate rose by 0.6 per cent, to 10.98 per cent; and with the change in the central bank rate, it rose to 11.43 per cent in the first half of 1951 and to 12.02 per cent in the

[10] The rates offered by the larger commercial banks on fixed deposits was raised by about ¼ per cent in August 1952, by another ¼ per cent in April 1953, and again by ½ per cent in June 1953.

[11] Even in October 1953, when central bank loans to commercial banks were at the maximum of Rs 4.7 million, they were equivalent to only 7 per cent of the balances kept by commercial banks with the central bank, and 2.3 per cent of commercial banks' loans and investments in the private sector.

TABLE 6. POSTWAR CHANGES IN CENTRAL BANK RATES AND CREDIT EXTENDED BY COMMERCIAL BANKS, SELECTED COUNTRIES

*(In per cent)*

| | Change in Central Bank Rate | | | Indices of Commercial Banks' Domestic Claims on Private Sector[1] | | Indices of Commercial Banks' Total Domestic Claims[1] | |
|---|---|---|---|---|---|---|---|
| | Old rate | New rate | Date of change | Month of change[2] | Corres. month, year later[3] | Month of change[2] | Corres. month, year later[3] |
| Brazil | 6 | 8 | May 1954 | 123 | 109 | 124 | 109 |
| Ceylon | 2.5 | 3 | Jul 23, 1953 | 109 | 114[4] | 101 | 102[4] |
| | 3 | 2.5 | Jun 12, 1954 | 114[5] | 112[4] | 102[5] | 113[4] |
| Chile | 6 | 8 | Mar 1951 | 112 | 124 | 112 | 124 |
| Costa Rica | 3 | 4 | Feb 1950 | 112 | 108 | 124 | 99 |
| | 4 | 5 | Apr 1954 | 120 | 107 | 112 | 106 |
| El Salvador | 4 | 3 | Mar 22, 1950 | 112 | 125 | 112 | 132 |
| Guatemala | 4 | 6 | Jan 1, 1954 | 112 | 113 | 111 | 111 |
| India | 3 | 3½ | Nov 15, 1951 | 128 | 91 | 107 | 96 |
| Japan | 4.38 | 5.11 | Jul 5, 1948 | ... | ... | 179 | 194 |
| | 5.11 | 5.84 | Oct 1, 1951 | 157 | 139 | 154 | 138 |
| Nicaragua | 4 | 5 | Aug 28, 1953 | 131 | 141[6] | 132 | 139[6] |
| | 5 | 6 | Apr 1, 1954 | 141[7] | 142 | 141[7] | 141 |
| Peru | 5 | 6 | Nov 13, 1947 | 119[8] | 114[8] | 114[8] | 114[8] |
| Philippines | 1½ | 3 | Oct 1949 | 101[6] | 95[9] | 101[6] | 98[9] |
| | 3 | 2 | Oct 1950 | 95[5] | 133[9] | 98[9] | 124[9] |
| | 2 | 1.5 | Feb 1954 | 104 | 115 | 105 | 112 |
| Turkey | 4 | 3 | Feb 26, 1951 | 121 | 143 | 91 | 172 |

Source: *International Financial Statistics* (Washington).
[1] Claims are as of end of month.
[2] Claims in corresponding month of previous year = 100.
[3] Claims in month of change = 100.
[4] 11 months later.
[5] July 1953 = 100.
[6] 8 months later.
[7] August 1953 = 100.
[8] Comparisons are between December and December.

second half of the year.[12] These changes indicate that the central bank rate in Chile, as in India, both follows and leads the movements of market rates.

The ultimate objective of any change in the central bank rate is not merely to influence market rates of interest, but also through them to affect the quantity of credit extended by the banking system. Sometimes this control can be achieved without affecting market interest rates, because the central bank rate change acts as a signal to commercial banks to ration credit. In an underdeveloped country, the raising of market interest rates through bank rate changes may, as in the case of Ceylon noted above, cause interest rates to remain high even after the inflationary danger has passed. Partly because of this, and partly because data on market rates of interest are not available in every country where central bank rate changes have taken place, an attempt has been made in Table 6 to assess the impact of the changes in the bank rate on the vol-

[12] Even without the increase in the central bank rate, the market rate would have risen, but probably by a smaller amount.

ume of credit granted by commercial banks to the private sector and to the economy as a whole.

It is true that many other factors affect the flow of credit extended by commercial banks. But if changes in the central bank rate are to be effective, then an increase in the bank rate should cause commercial bank credit to contract, or at least its rate of expansion to slow down; a decrease in the bank rate should cause credit expansion, or at least reduce the rate of decline in credit. From Table 6 it can be seen that in most cases (e.g., Brazil, Costa Rica, India, Japan in 1951, and Peru) the rate of credit expansion was checked when the bank rate was raised; and that when the bank rate was lowered, the rate of credit expansion increased (e.g., El Salvador, Ceylon for total volume of credit, the Philippines, and Turkey). In Chile and Nicaragua, however, the reactions were in the opposite direction, while in Guatemala the change in the bank rate had no effect either way.

From the foregoing evidence it may tentatively be concluded that changes in central bank rates in underdeveloped countries influence both the level of interest rates in the organized money markets and the amount of credit extended by commercial banks.

## Connection with World Money Markets

Very little statistical information is available about the connection between organized money markets in underdeveloped countries and world money markets. It is generally believed, however, that the countries of Asia have had close links with the money markets of the metropolitan powers which ruled them, namely, the United Kingdom, France, and the Netherlands. On the other hand, Latin American countries have had comparatively little access to the New York or Canadian money markets.

The supply of loanable funds from world money markets to an underdeveloped country is channeled in two ways: (1) The branches of foreign exchange banks operating in an underdeveloped country obtain overdrafts or loans from their head offices or from other sources in the world money markets. (2) The banks in underdeveloped countries rediscount both export and import bills of exchange in the world money markets and thereby replenish their funds for further lending.

For purposes of illustration, an attempt may be made to compare these two sources of financing for Ceylon. The first method of obtaining funds seems to be less important for Ceylon, since the commercial banks' foreign borrowing plus the interbank deposits from foreign centers is generally much smaller than the sum of "foreign currency on hand" and

"balances due from banks abroad" and also smaller than the total of export and import bills discounted (Table 7). Neither the exact amount of export and import trade financed through bills of exchange nor the amount of bills rediscounted by commercial banks in world money markets is known. Their magnitudes may, however, be estimated on certain assumptions, as indicated in Table 7. Commercial banks in Ceylon having access to world money markets would, with a view to replenishing the limited funds at their disposal, prefer to rediscount foreign bills of exchange rather than to hold them to maturity. With the funds thus obtained they can make loans and overdrafts at rates higher than the discount rate. Therefore, it is safe to assume that most if not all of the import and export bills discounted by the commercial banks in Ceylon are rediscounted in world money markets, such as London.

It has further been assumed that commercial banks hold bills for an average period of about two weeks before they are rediscounted. Considerable financial assistance is thus received by the commercial banks in Ceylon through the mechanism of rediscounting bills of exchange. About one fourth to one third of the import trade and about three fourths of the export trade of Ceylon is estimated to be financed through London or other world money markets.

In other sterling area countries, similar results could be expected. In Burma, most of the prewar rice export trade was financed by London and Bombay, which in turn was dependent on London for funds. Finance from London was obtained by rediscounting bills of exchange. After the

TABLE 7. INDICATORS OF ASSISTANCE FROM WORLD MONEY MARKETS TO COMMERCIAL BANKS IN CEYLON, 1949–54[1]

(*Cols. 1–6 in millions of rupees*)

| | Commercial Banks | | | | Annual Flow of Import Bills Discounted (Col. 3 × 26)[4] | Annual Flow of Export Bills Discounted (Col. 4 × 26)[4] | Annual Flow of Import Bills as Per Cent of Total Annual Imports[5] | Annual Flow of Export Bills as Per Cent of Total Annual Exports[6] |
|---|---|---|---|---|---|---|---|---|
| | Foreign liabilities[2] | Foreign assets[3] | Bills discounted | | | | | |
| | | | Import | Export | | | | |
| | (1) | (2) | (3) | (4) | (5) | (6) | (7) | (8) |
| 1949 | 28.1 | 101.5 | 5.2 | 24.7 | 135.2 | 642.2 | 13.2 | 60.4 |
| 1950 | 31.6 | 180.4 | 7.6 | 44.9 | 197.6 | 1,167.4 | 17.0 | 74.5 |
| 1951 | 33.5 | 137.4 | 28.4 | 43.6 | 738.4 | 1,133.6 | 47.5 | 59.5 |
| 1952 | 54.0 | 50.3 | 17.3 | 45.9 | 449.8 | 1,193.4 | 26.4 | 79.5 |
| 1953 | 28.0 | 50.8 | 13.5 | 45.9 | 351.0 | 1,193.4 | 21.8 | 76.3 |
| 1954 | 18.6 | 73.0 | 22.0 | 59.5 | 572.0 | 1,547.0 | 40.9 | 85.6 |

Source: Central Bank of Ceylon, *Bulletin*.

[1] Columns 1–4, data as of end of year.

[2] Sum of foreign borrowings, foreign interbank deposits, and demand deposits of nonresidents.

[3] Foreign currency on hand and balances due from banks abroad.

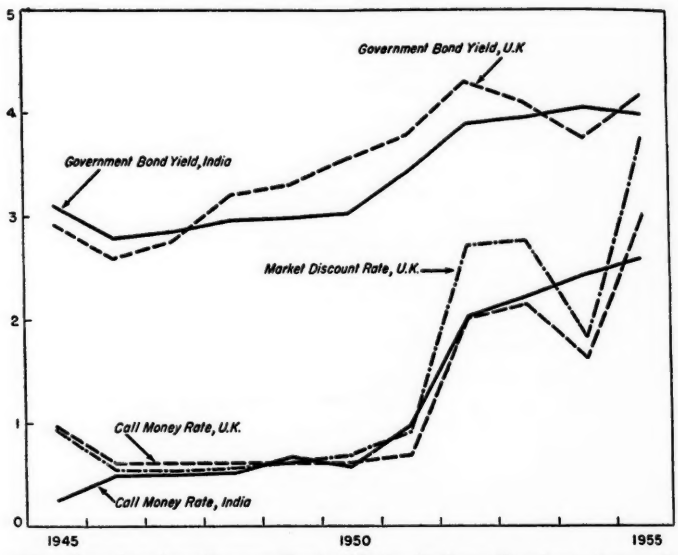
[4] It is assumed that commercial banks hold bills for an average period of about two weeks before discounting them.

[5] If monthly data on import bills discounted were taken instead of end of year data, the percentages for 1952, 1953, and 1954 would be 32.2, 23.3, and 26.8, respectively.

[6] If monthly data on export bills discounted were taken instead of end of year data, the percentages for 1952, 1953, and 1954 would be 72.2, 82.0, and 82.3, respectively.

CHART 1. INTEREST RATES IN INDIA AND THE UNITED KINGDOM, ANNUALLY, 1945–55[1]

*(In per cent per annum)*




[1] Based on data from Reserve Bank of India, *Bulletin* (Bombay); *International Financial Statistics* (Washington) through the September 1955 issue; and data supplied to the Fund.

war, when rice exports were handled by the government-owned State Agricultural Marketing Board, this method of obtaining finance declined. Burma, however, is still connected with London; in 1950–51, when there were insufficient local banking funds to finance the large volume of import trade created by the sudden relaxation of import controls, and in 1952, when there was a shortage of funds because of expansion of domestic output, the foreign exchange banks, mainly British, were able to import funds to meet the situation. During the peak season of 1952, such funds were estimated at K 50 million, or about a quarter of commercial bank loans, advances, and bills discounted outstanding.

In India, a study of the movement in short-term rates in Bombay and London also indicates the existence of a connection with London.[13]

[13] The long-term interest rates as indicated by government bond yields in the two centers are not so closely related as short-term rates because each market has its own central bank policy with regard to the price at which it will support government bonds to enable governments to borrow cheaply.

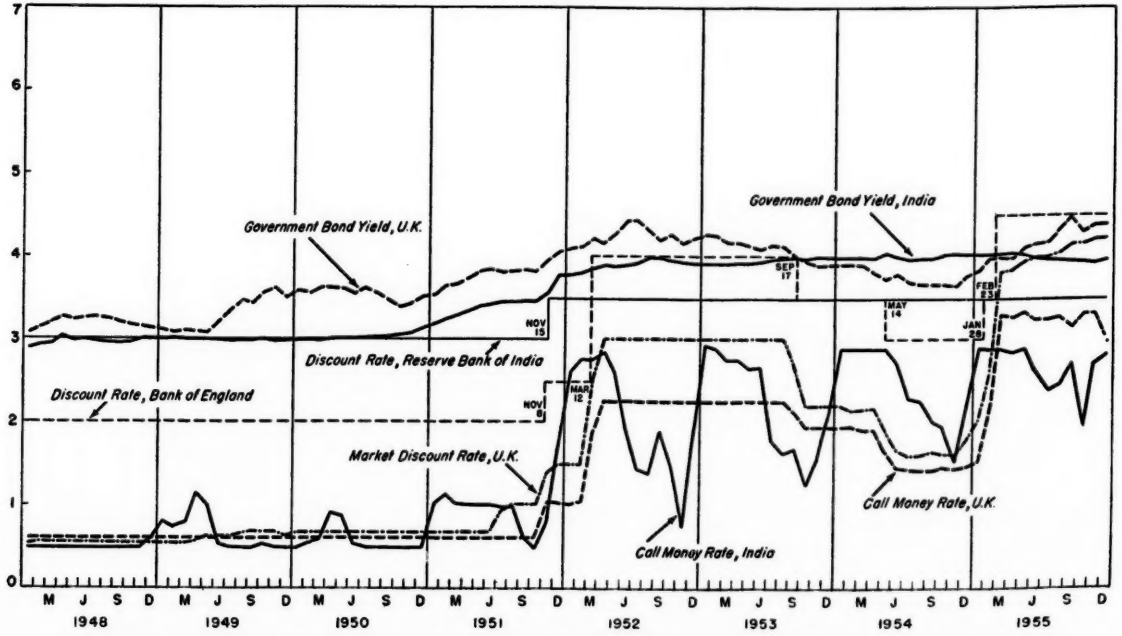
During the postwar period, 1948–54, the short-term rates in Bombay were much higher than those in London during India's busy season, which is roughly from December to May, while in the slack season the rates in Bombay were lower than the London rates. The relative positions of the annual average rates have therefore depended a great deal upon the length of the busy season and the extent to which the Bombay rates have been higher in the busy season and lower in the slack season. In spite of this, the annual averages of the short-term rates have moved together fairly closely (Chart 1). The London discount rate seems to influence the short-term rate in India. Thus, the more than seasonal rise in short-term rates in India in the latter half of 1951 and in early 1952 was preceded by a rise in the London market discount rate (Chart 2). This rise in the London market discount rate occurred several months before the Bank of England raised its discount rate on November 8, 1951.

In the Philippines, much of the foreign trade is financed through export and import bills. During 1949, the value of export bills passing through the commercial banks in the Philippines amounted to 51 per cent of exports, and the value of import bills to 52 per cent of imports.[14] It may be assumed that most of these bills were rediscounted in New York, and therefore that the money market in Manila is closely connected with New York.

An underdeveloped country by having access to world money markets benefits from the lower rates there prevailing; but it also suffers from the disadvantage that, by its very dependence, its domestic rates of interest tend to fluctuate with changes in interest rates and lending facilities in the developed countries. However, the example of Argentina during the period 1935–39 indicates the extent to which an underdeveloped country can follow a policy of monetary "insulation." In Argentina, the large inflow of capital during 1936 and 1937 was "sterilized" by the sale of treasury bonds and treasury bills by both the Government and the central bank, the proceeds being used to purchase foreign exchange. The amount of funds sterilized amounted to M$N 1,060 million by May 1937. When the balance of payments position became unfavorable in the latter half of 1937, the foreign exchange was released from the sterilized official holdings and the central bank repurchased some of the treasury bonds it had sold previously. By this method, the level of interest rates and the amount of domestic credit created by commercial banks were stabilized. During 1936–37, the period of capital inflow, money was cheap but interest rates fell only slightly and during 1937–38, when interest rates rose

[14] The percentages were even higher for the earlier postwar years. In 1947, the export percentage was 82 and the import percentage 71. (Central Bank of the Philippines, *Annual Report, 1949* (Manila, 1950).) Unfortunately data are not available for prewar years or for years later than 1949.

CHART 2. INTEREST RATES IN INDIA AND THE UNITED KINGDOM, MONTHLY, 1948–55[1]
*(In per cent per annum)*




[1] Based on data from Reserve Bank of India, *Bulletin* (Bombay); *International Financial Statistics* (Washington) through the September 1955 issue; and data supplied to the Fund.

TABLE 8. INTEREST RATES IN ARGENTINA, DECEMBER 1935–DECEMBER 1938

(*In per cent per annum*)

| | Thirty-Day Treasury Bill Rate | Government Bond Yield |
|---|---|---|
| December 31, 1935 | 2.45 | 5.22 |
| December 31, 1936 | 2.08 | 4.79 |
| June 30, 1937 | 2.00 | 4.70 |
| December 31, 1937 | 2.05 | 4.87 |
| June 30, 1938 | 2.12 | 4.88 |
| December 31, 1938 | 2.12 | 4.92 |

Source: League of Nations, *Money and Banking, 1938-39*, Vol. I, *Monetary Review* (Geneva, 1939), p. 62.

again, the increase was very moderate because of the policy of monetary "insulation" followed by the monetary authorities (Table 8).

Ceylon's experience during the period of high activity resulting from the Korean conflict illustrates the manner in which the central bank can, by timely action, reduce the inflationary impact of, and control the movement of, banking funds. In 1950 and 1951, the central bank—through its readiness to purchase, in any amount at any time, sterling up to six months forward at the spot rate of 1s. 6d. per rupee—successfully encouraged commercial banks to retain balances overseas, especially in London. When the worst of the monetary inflation had passed, the central bank in January 1952 reversed this policy, and forward exchange rates were increased. It also fixed working sterling balances for each bank and refused to purchase sterling forward from any bank whose actual balance in sterling exceeded the working balance limit.

## Seasonal and Cyclical Fluctuations

### SEASONAL FLUCTUATIONS

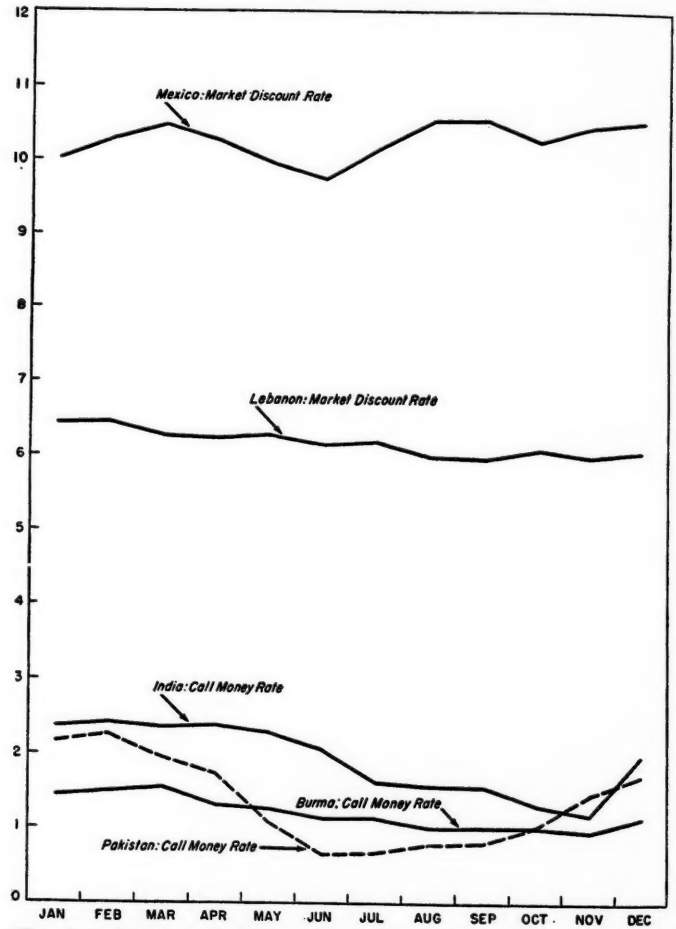
The economies of most underdeveloped countries are export economies depending mainly on one or a few agricultural commodities with strong seasonal characteristics. Therefore, their demands for loanable funds fluctuate seasonally. Whether these fluctuations also produce seasonal interest rate movements depends upon the elasticity of the supply of loanable funds.

Judging by the changes in call loan rates or in the discount rates prevailing in the market, seasonal fluctuations are to be found in interest rates in Burma, India, Lebanon, Mexico, and Pakistan (Chart 3). For most other countries, data are not available, but in Ceylon there seem to be no seasonal fluctuations, presumably because of easy access to the London money market. In India and Pakistan, rates are higher in the

[1] Based on data from Reserve Bank of India, *Bulletin* (Bombay); *International Financial Statistics* (Washington) through the September 1955 issue; and data supplied to the Fund.

CHART 3. SEASONAL FLUCTUATIONS IN INTEREST RATES, SELECTED COUNTRIES[1]

(*In per cent per annum*)



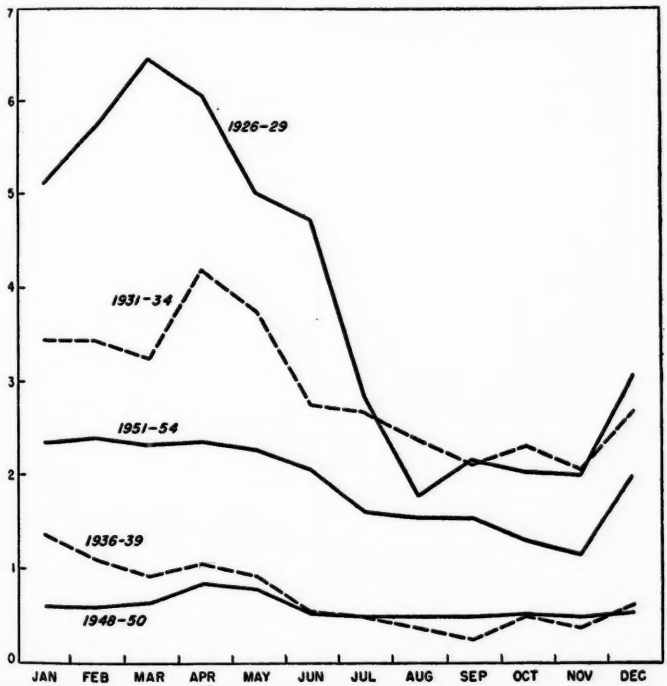

[1] Based on data for 1951–54 from *International Financial Statistics* (Washington) and Union Bank of Burma, *Bulletin* (Rangoon).

busy season, November to April, while in Burma they are highest in the first quarter of the year. The seasonal change in interest rates is not so pronounced in Lebanon and Mexico.

The experience of Burma and India indicates that seasonal fluctuations were more violent before the big depression of 1929 when the interest rates were much higher than in recent years and central banks had not yet been established (Charts 4 and 5). There was hardly any seasonal fluctuation in interest rates in India during 1948–50 because of the Reserve Bank of India's willingness to support the government bond market, and commercial banks were selling government bonds to meet the increasing demands for funds, both seasonal and otherwise. With the

CHART 4. SEASONAL FLUCTUATIONS IN CALL MONEY RATE, INDIA, 1926–54[1]

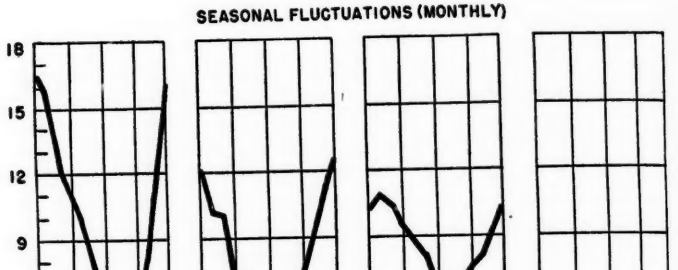
*(In per cent per annum)*

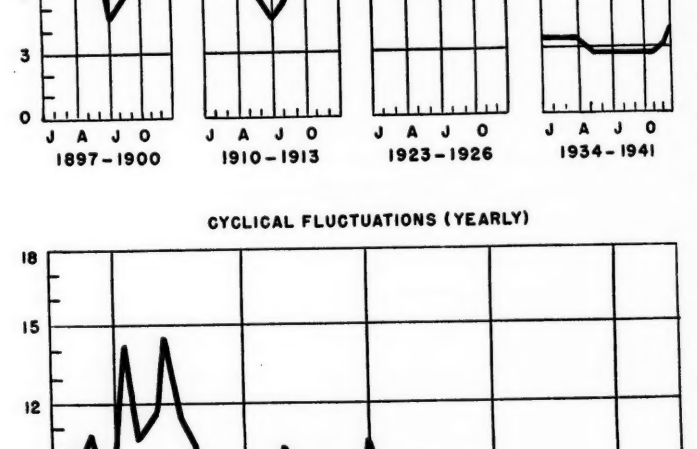



[1] Based on data from *International Financial Statistics* (Washington) and Reserve Bank of India, *Banking and Monetary Statistics of India* (Bombay, 1954).

CHART 5. SEASONAL AND CYCLICAL FLUCTUATIONS IN THE CHETTIAR CURRENT RATES OF INTEREST IN BURMA[1]

*(In per cent per annum)*




[1] Duplicate of chart in U Tun Wai, *Burma's Currency and Credit* (Calcutta, 1953), pp. 150–51. That chart is based on data from *Report of the Burma Provincial Enquiry Committee, 1929–30* (Rangoon).

reversal of this policy by the Reserve Bank of India in 1951, seasonal fluctuations in the call loan rate became apparent (Chart 4), but they are still not so pronounced as in predepression days or even as before the war.

Prewar data on interbank call loan rates in Burma are not available, but Chettiar[15] interest rate statistics throw light on the subject. The Chettiar call deposit rate or current rate was fixed for only one month at a time after account was taken of all the other indigenous rates in the market and, more important still, the rate for joint stock bank advances to the Chettiars.[16] Therefore, it can be concluded that changes in Chettiar current rates were representative of changes in Rangoon market rates as a whole. The seasonal fluctuations in interest rates were very large in Burma at the end of the nineteenth century (Chart 5). With each succeeding decade, however, they became smaller, because more and more British exchange banks came to be established in Burma, thus improving Burma's access to the London money market and the availability of seasonal funds. The Chettiar current rates during 1934–41 probably do not represent the market rates because, with the big depression in 1929, Chettiars ceased making new loans[17] and their credit with the joint stock banks was not so good as previously. There was probably more seasonal fluctuation in interest rates during the 1934–41 period than is suggested by the Chettiar current rates.

### Cyclical fluctuations

The available evidence suggests that interest rates in organized money markets in underdeveloped countries are subject to cyclical fluctuations similar to those in developed countries. Most of the evidence comes from experience during the great depression beginning in 1929 and during the period of high economic activity, and the subsequent decline, related to the Korean conflict. For Burma and India, indeed, fairly long series are available, the Burmese series showing movements of the Chettiar current rate of interest (explained above), and the Indian series movements of the bank rate of the Presidency Bank of Bengal, i.e., the rate charged for demand loans on such securities as government paper.[18] For countries

[15] Chettiars came from Madras to Burma (as to other Southeast Asian countries) to serve as bankers, organized on eastern lines, mainly for financing agriculture.

[16] See U Tun Wai, *Burma's Currency and Credit* (Calcutta, 1953), p. 47.

[17] The depression had destroyed the ability of the agriculturists to repay loans to the Chettiars. Insofar as land had been the chief collateral and mortgages were foreclosed, the Chettiars became owners of land.

[18] Until the establishment of the Imperial Bank of India in 1921 there were three Presidency Banks—the Bank of Bengal established in 1806, the Bank of Bombay in 1840, and the Bank of Madras in 1843. Although these banks had the right of note issue until 1862, were partly owned by the Government until 1876,

which are linked closely to world money markets, cyclical fluctuations seem to have been a common feature for a long time (Charts 5 and 6).

*The great depression.* During the great depression, interest rates in developed countries moved in two different ways. In one group of countries, represented by Sweden, the United States, and the United Kingdom, which had depreciated their currencies, interest rates fell rapidly, with the long-term rate falling much more slowly than the short-term so that the spread between the two widened. In the other group, the countries of the gold bloc, such as France, Belgium, the Netherlands, and Switzerland, interest rates not only did not fall but they even tended to rise. These gold bloc countries, because of nondepreciation, had balance of payments deficits, lost gold to depreciating countries, and were faced with deflation. The deflationary pressure reduced income and prices, so that government revenues fell and budget deficits increased. Since most governments in this group covered their deficits by domestic borrowing, private savings were absorbed by the government and interest rates began to rise. This rise was accentuated when the central banks, following the "rules of the gold standard," adopted a tight money policy and raised the bank rate.

In the first group, the fall in interest rates was accelerated by a virtual cessation of capital exports, a reduced volume of world trade—and consequently a smaller need for finance from their money markets—and lastly by the very fact of currency depreciation, which brought about balance of payments surpluses leading to the acquisition of foreign assets and the expansion of the money supply.[19]

In the underdeveloped countries, interest rates fell during the depression, but for two different sets of reasons. In one group of countries, which is illustrated by India, the decline in rates was due to the fall in rates in world money markets, such as London.[20] As in the United Kingdom, the long-term rate in India fell more slowly and less than the short-term rate, and the spread between the two rates was therefore increased. During 1925–29, the absolute difference between the government bond yield and the call money rate in Calcutta was 1.6 per cent per annum; this increased to 3.1 per cent during 1932–36. In the second group of countries, mainly those of Latin America, the fall in interest rates resulted from the aban-

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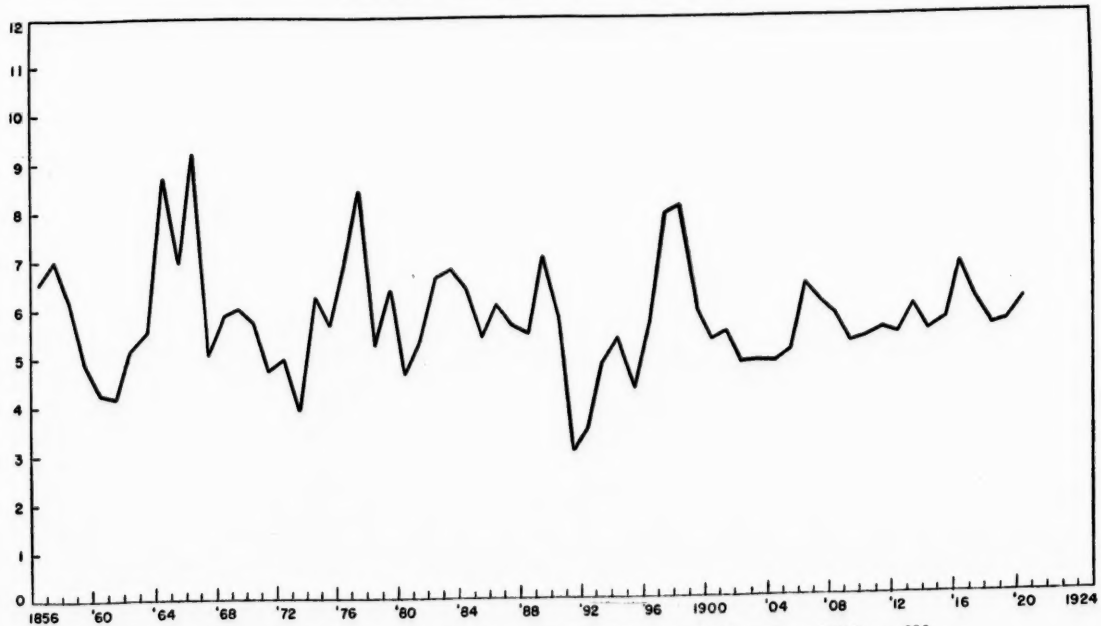
and acted as bankers to the Government, they were basically commercial banks. They did, however, also play an important role in the development and regulation of the commercial banking system until 1921 when they were amalgamated to form the Imperial Bank of India.

[19] See League of Nations, *Commercial Banks, 1929–34* (Geneva, 1935), pp. L–LIV for further details.

[20] Another factor in India was the large scale dishoarding of gold by the peasant population and the resulting export of gold, which increased the money supply and the cash liquidity of the banking system.

CHART 6. BANK RATE OF THE PRESIDENCY BANK OF BENGAL, INDIA, 1876–1920

CHART 6. BANK RATE OF THE PRESIDENCY BANK OF BENGAL, INDIA, 1856–1920[1]
*(Average of daily rates[2] in per cent per annum)*




[1] From Reserve Bank of India, *Banking and Monetary Statistics of India* (Bombay, 1954), p. 690.
[2] The rates were not changed daily but about 15 to 20 times a year.

donment of the gold exchange standard[21] and changes in policy toward such protective devices as high interest rates and restrictions on bank credit creation. The fall in interest rates is shown in the substantial reduction in discount rates of central banks. In Chile, the discount rate was reduced from 9 per cent to 4½ per cent between June 1931 and August 1932, in Colombia from 7 per cent at the end of 1931 to 4 per cent at the end of 1933, and in Ecuador from 10 per cent in 1931 to 4 per cent in 1932. In other countries, such as Brazil, the price of government bonds rose and the yield fell significantly during 1932 and 1933.

The deflationary effect of the depression was rather short-lived in Japan, because interest rates were dominated by the policy of credit expansion caused by government deficit financing. There was a flight of capital when the United Kingdom abandoned the gold standard, and the Bank of Japan's reserves fell by 400 million yen, or 50 per cent. This drain, however, was halted when Japan abandoned the gold standard in December 1931, and within a year the gold value of the yen had fallen by 60 per cent. Deficit financing was undertaken by the Government on account of the war in China and also for domestic reasons. The total volume of government bonds outstanding increased from 4,500 million yen in October 1931 to 8,200 million yen in October 1935, most of which were held by commercial banks; the Bank of Japan bought these bonds in the first instance but resold them to the commercial banks.

Partly as an antideflationary measure and partly to enable the Government to borrow money cheaply, the Bank of Japan reduced its discount rate by stages, from 5.48 per cent in 1929 to 4.38 per cent in August 1932, and still further by stages, to 3.29 per cent in April 1934. The average yield on government bonds also fell, from 6.43 per cent in 1929 to about 4 per cent in 1936. The discount rate charged by commercial banks on 60-day commercial paper, however, fell only slightly, from 4.85 per cent in 1929 to a little over 4 per cent in 1937. The reason for this small decline in commercial bank lending rates to the private sector was that the banks had utilized their available excess funds to purchase government bonds.[22] At times, money conditions were relatively tight for the private sector; the call money rate of banks in Tokyo, though declining from 3.6 per cent in 1930 to 2.56 per cent in 1934, rose gradually to 2.85 per cent by 1936.

[21] The first group of countries also depreciated their currencies with reference to gold, but most of their important trading partners also depreciated their currencies. In the second group of countries, depreciation was generally much more than that of their main trading partners; by the end of 1934 the currencies of Brazil and Bolivia had depreciated by about 60 per cent, of Ecuador by 75 per cent, of Mexico by 67 per cent, and of Argentina by 65 per cent, while the United Kingdom and the United States depreciated their currencies by only 40 per cent.

[22] Until 1936, the average yield on government bonds was higher than the commercial bank discount rate on 60-day commercial paper.

Interest rates in China fell in the early years of the depression, the interbank call loan rate in Shanghai, for example, moving from 5.04 per cent in 1929 to 1.80 per cent in 1933. Between 1933 and 1935, however, the rise in the price of silver, on which the currency system of China was based, placed the country under deflationary pressure and interest rates began to rise; the interbank call loan rate in Shanghai advanced to over 5 per cent in 1935. The deflationary pressure and the outflow of silver was halted by the demonetization of silver and the depreciation of the currency in November 1935.

*Activity resulting from Korean conflict.* A valuable case study can be based on the experience of a number of countries in Asia and the Far East during and after the Korean conflict. During the period of increased activity, the demand for loanable funds expanded because of the higher level of economic activity resulting from the larger volume of exports. This increased demand was met by an expansion of commercial bank credit, brought about either by utilizing excess cash balances (Burma, Indonesia, and the Philippines), by sale of government securities (especially India), or by the import of banking funds (Burma and Pakistan). The expansion of credit, however, was not sufficient to meet the larger need for funds, and, therefore, interest rates rose in the organized money markets in many of these countries. The rise occurred at all levels, affecting the government bond yield, the call money rate between banks, and the lending rates of commercial banks.[23] In Burma, the call money rate rose from 1 per cent to 1½ per cent in the fourth quarter of 1951, while commercial banks raised their minimum rates by about ½ per cent for most categories of loans in April and December 1951. In Taiwan, commercial banks increased their lending rates from 3.3 per cent to 4.5 per cent *per month* in April 1951. In India, the minimum lending rates of exchange banks on secured advances was raised from 1½ per cent per annum in December 1949 to 2½ per cent in December 1950 and to 3½ per cent in September 1951; the maximum lending rates of the major Indian scheduled banks on secured advances was raised from 7½ per cent per annum in September 1950 to 9 per cent in December 1950. With the raising of the bank rate in November 1951, from 3 per cent to 3½ per cent, Indian commercial bank lending rates also rose by ½ per cent. In Japan, commercial bank lending rates rose slightly in September 1951, and sharply a month later after the Bank of Japan raised its discount rate from 5.11 per cent to 5.84 per cent per annum on October 1, 1951. In Malaya, the members of the Exchange Banks' Association in December 1951, raised its rates on loans against most types of collateral by ½ per cent. In the Philippines, the weighted average rate on loans, dis-

[23] See Economic Commission for Asia and the Far East, *Economic Survey of Asia and the Far East, 1951* (New York, 1952), pp. 191–97.

counts, and overdrafts of commercial banks rose from 5.92 per cent in the second quarter of 1950 to 6.19 per cent in the first quarter of 1951.

After activity had fallen sharply, interest rates fell again in some countries (Burma, Malaya, and the Philippines), but in others, such as India and Japan, where the dear money policy continued to be used as an anti-inflationary measure, interest rates, generally speaking, remained high or continued to rise. In India, the call money rate rose from 1.0 per cent in 1951 to 2.46 per cent in 1954, and the government bond yield from 3.42 per cent to 3.99 per cent during the same period. In Japan, although the call money rate rose to 8.06 per cent in 1952, it leveled off around 8 per cent, and in 1954 it averaged 7.85 per cent, against 7.12 per cent in 1951.

## Long-Term Trend

The general expectation is that the long-term trend of interest rates in underdeveloped countries, at least in the organized markets, should be downward.[24] Generally speaking, in these countries the banking systems and with them the money markets are likely to develop at a faster rate than the other sectors of the economy. The long-term supply of loanable funds therefore tends to increase more rapidly than the long-term demand. Where, for one reason or another, the growth of banking has been restricted or the banking system subjected by law to many restrictions, including controls on interest rates and of the purposes for which loans may be granted (as in a number of countries in Latin America), the long-term trend of interest rates may, however, not be downward.

In some countries in Asia, a comparison between interest rates before and after the great depression (1929–34) and the rates prevailing today show in fact a definite downward trend. This is true especially in Burma, Ceylon, and India. In Burma the level of the Chettiar current rate in the thirties was lower than in the twenties and also lower than the rates prevailing about the turn of the century (Chart 5). In India, judging by the bank rate of the Presidency Bank of Bengal, there was up to 1920 no apparent change in the long-term trend of interest rates. The effect of the great depression and the emergence of cheap money policy during and immediately after the war have caused interest rates at present to be lower than in the past, in spite of the reversal of the cheap money policy since 1951. Thus, during the period 1928–34 the call money rate in Bombay averaged 3.47 per cent per annum and the government bond yield was 5.09 per cent per annum. Subsequently, both rates declined.

[24] This may be delayed if underdeveloped countries attempt to implement overambitious development programs and thus create a long inflationary period. The monetary authorities may then have to maintain or raise interest rates to control inflation.

the 1948–54 averages being 1.36 per cent and 3.46 per cent per annum, respectively.

Long-term data for Latin America are not available. But judging from the generally inflationary conditions prevailing there and also from limited information on Brazil and Chile, it seems that the long-term trend of interest rates has not been downward. In Chile, the weighted average rate of interest on loans granted by commercial banks was 8.67 per cent during 1929–34. The average was lower during the depression, but in the war and postwar years it has again been high. During 1949–54 it averaged as much as 11.67 per cent. In Brazil, the government bond yield on 5 per cent bonds and obligations averaged 6.33 per cent during 1929–34 but was 7.05 per cent during 1949–53. In Argentina, however, government bond yields in recent years have been much lower than they were two or three decades ago. During 1929–34 they averaged 6.44 per cent, while in 1949–53 they were only 3.26 per cent.

Apart from any movement in the interest rate on loans against a specific type of collateral, the weighted average rate will tend to fall as the economy develops and business units hold larger quantities of financial assets, such as government bonds, which are more attractive to bankers as collateral. The loans against such collateral will tend to grow in importance at the expense of loans granted against less attractive collateral, such as land and houses. Since the rate on the former type of collateral is lower than on the latter type, the weighted average rate will fall.

The average level of interest rates in the organized money markets of underdeveloped countries can thus be lowered by encouraging the development of the banking system. Closer connections between these markets and world money markets, such as London, would also help in reducing interest rates. Statutory control of interest rates, though necessary at times, usually does not lead to a lowering of the effective rate; all it ensures is that the nominal rate is within the law as ways and means are found to circumvent the law through higher minimum deposit requirements, better types of collateral, etc. Where banking development is slow, governments may consider lending money at low rates of interest in competition with private lending and thus attempt to bring down interest rates. Government lending is already of some significance in some underdeveloped countries, such as Burma, Japan, and Pakistan in Asia, and Mexico in Latin America. The solution of the problem of high interest rates, however, is not simple. Where government lending is financed by the printing press and not from budgetary surpluses, there is a great likelihood of inflation and of a cyclical rise of interest rates. However, if government lending is financed by tax receipts and borrowing from the public (i.e., genuine savings), and if the quantity of such lending is significant, then in the long run interest rates must fall.

## Conclusion

The interest rate structure and lending practices in the organized money markets of the underdeveloped countries conform fairly closely to those prevailing in developed countries. This is to be expected because the organized money markets in underdeveloped countries are dominated by commercial banks which have been modeled upon the commercial banking practices of developed countries.

The control exercised by the central banks in the underdeveloped countries over the money markets is rather loose, especially when the instrument of control is the "bank rate." The "bank rate," however, is not as ineffective as might be expected considering the small amount of central bank lending to commercial banks. A change in "bank rate" is indicative of the policy which the central bank wishes to follow; and because of its additional powers of selective credit control, it has to a certain extent succeeded in determining the cost and availability of commercial bank credit in the organized money market.

The sterling area countries and others linked financially with the money markets of more developed countries have had lower rates of interest in their organized money markets than the underdeveloped countries of Latin America and the Middle East. With access to the world financial markets, local commercial banks have borrowed cheaply by rediscounting foreign trade bills of exchange and thus have been able to charge lower rates of interest on their advances and overdrafts.

The long-term trend of interest rates in underdeveloped countries is downward, though in some countries—especially in Latin America where there has been inflation for many decades—interest rates have not fallen. It can be expected that, with further development of banking and economic growth, the rate of interest in the organized money markets will fall. The establishment of central banks in many countries, especially in Asia, after the war, should also in the long run reduce the cost of credit and make it more readily available.

Seasonal fluctuations in interest rates in underdeveloped countries have their origin in the seasonality in the marketing of the major export crops. With the development of central banks and the abandonment of rigid exchange standards which had tied the volume of currency to the amount of foreign exchange available, the amplitude of fluctuations in interest rates has generally been reduced. Cyclical fluctuations in rates have been found in a number of underdeveloped countries, and probably also occur elsewhere, although the relevant statistical data are defective. The amplitude of such fluctuations may be expected to be reduced as each country is able to follow an "insulated" monetary policy facilitated by the development of strong central banks.

# The Repercussions of Economic Fluctuation in the United States on Other Parts of the World

J. J. Polak*

THE DEPRESSION of 1929–32 focused attention on the tremendous effect that fluctuations in the U.S. economy could in certain circumstances exercise on the economies of other countries. Against these depressive forces from abroad even the newly discovered remedy of income creation by the government to counteract declines originating in the private sector found only restricted applicability, as in open economies national expansionary policies will soon endanger the balance of payments. Thus the trouble with declines in exports to the United States was not only that they reduced incomes elsewhere, tending to lead to a cumulative decline in world income, but also that they reduced the "supply of dollars"—the term was aptly introduced in 1943[1]—and thus limited the ability of governments abroad to combat imported deflation by domestic reflation even where they were willing to follow a policy of this nature.

The anxieties created by this experience loomed large in the consideration of international economic problems in the 1940's. Much effort went into devising arrangements for additional supplies of dollars in case too few dollars should be forthcoming through U.S. imports, and stand-by measures to allocate a supply of dollars that might still prove insufficient. Thus, the provison of additional dollars in the event of a depression in the United States was one of the important motivations in the establishment of the International Monetary Fund (1944); and the "scarce currency" clause was inserted in the Fund Agreement in order to provide for the rationing of a dollar supply that might prove inadequate. The first group of experts which the United Nations as-

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[1] Hal B. Lary and Associates, *The United States in the World Economy* (U.S. Department of Commerce, Bureau of Foreign and Domestic Commerce, Economic Series No. 23, Washington, 1943).

sembled on full employment also directed its attention to the problem of the dollar supply. By their failure to give adequate attention to the strong elements of inflation in the postwar world, the experts could come up with a simple solution to the problem: the United States should make available in every year at least as many dollars as in the year before; insofar as these dollars did not come naturally from imports of goods and services, the U.S. Government should put them up as a "deposit" with the Fund, to be available for use by other countries to the extent that they were hit by the decline in U.S. imports.[2] A successor group of experts, instructed to produce "alternative practical ways" of dealing with the problem of reducing the international impact of recessions, reported two years later. Estimating that a postwar recession of 1937–38 intensity would reduce the supply of dollars by $10 billion over two years (the figure has frequently been misquoted as $10 billion *a year*), the group concluded that the resulting drain on the Fund would soon exhaust its gold and dollar holdings of about $3 billion. As a remedy the experts suggested more liberal drawing policies of the Fund and an increase in its size.[3]

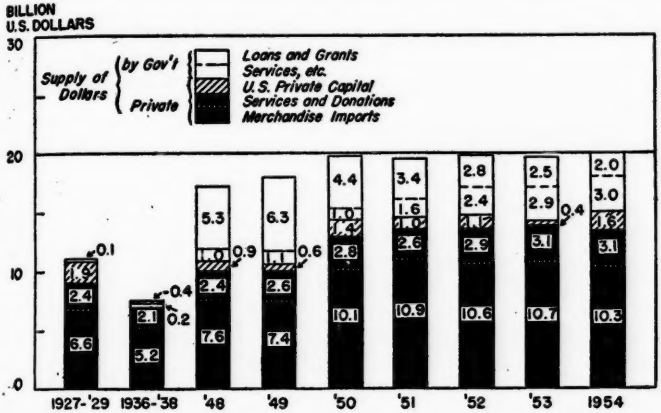
In addition to the consideration given at the international level, the fear of U.S. depressions constituted a powerful argument in national economic policies for continued trade discrimination and currency inconvertibility as permanent features of the postwar world, rather than as transitional devices to cope with a postwar readjustment program. The experience of 1949 appeared to vindicate those who feared that too rigid a link to the U.S. economy involved countries in excessive risks. A recession in the United States that reduced real gross national product by only 1 per cent (on an annual basis) was accompanied by a severe payments crisis and the devaluation of some 20 currencies within a few days. The events appeared to justify Professor Robertson's quip that when the United States sneezes, the rest of the world catches pneumonia.

Not many years have passed since these reports were filed or since the experience of 1949. But there has been a considerable change in sentiment. The 1953–54 recession has come and gone without ruffling the concurrent European boom. Increasingly, the 1949 experience tends to be interpreted in terms of the straw that broke the camel's back. May it be assumed, then, that the economy of the outside world is now reasonably immune from fluctuations in the U.S. economy? Or that appropriate tools of international policy are available to offset serious international effects of any future decline in the United States?

[2] United Nations, *National and International Measures for Full Employment* (Lake Success, December 1949). This report is often referred to as the "Kaldor Report."

[3] United Nations, *Measures for International Economic Stability* (New York, November 1951). This report has been particularly associated with the chairman of the group, Professor James W. Angell.

CHART 1. U.S. SUPPLY OF DOLLARS TO REST OF WORLD DEFLATED BY INDEX (1948 OR 1954 = 100) OF U.S. EXPORT PRICES[1]




[1] Dollar figures deflated by U.S. export price index to adjust the supply of dollars to changes in purchasing power over U.S. goods. The adjustment is not large for most postwar years. From 1948 to 1954, the index moved as follows: 100, 93, 90, 103, 102, 102, 100.
For 1955 figures, see text footnote 5.

A look at Chart 1 will enable us to understand the decrease in anxiety over the past half decade and to appraise the extent to which concern is still justified.

1. In every year since 1948 the supply of dollars on account of goods and services alone has been larger in real terms (i.e., in purchasing power over U.S. exports) than it was in 1927–29. Apart from one jump of about 30 per cent in 1950, it has been remarkably stable. There was *no* decline in 1949 (a small decline in goods being offset by a rising trend in services).

2. An entirely new aspect of the postwar period is that from a third to a fourth of the supply of dollars has come from the U.S. Government.[4] While the composition of this item has changed over the years, as pur-

[4] A similar chart published in a 1953 Report of the International Monetary Fund to the United Nations ("The Adequacy of Monetary Reserves," *Staff Papers*, Vol. III, No. 2, October 1953, p. 216) did not include official loans and grants in the dollar supply although it did include them in some of the tables. Recent changes in the type of U.S. Government foreign expenditure have made the dividing line between official grants of economic aid and official purchases of services, such as offshore procurement, military expenditure, etc., much less clear-cut than it used to be; for this reason all government payments abroad (but not the delivery of military end-items under military aid) have been included here in the dollar supply.

chases abroad increased and grants and loans decreased, the total has been very stable, ranging between $5.0 billion and $5.4 billion in the last five years.

3. Movements of U.S. private capital are the most volatile element in the supply of dollars, both absolutely and relatively, although they have not accounted for more than 8 per cent of the total dollar supply in any recent year.

4. Such fluctuations as did occur in the three groups showed some tendency to cancel out. As a result, the total supply of dollars on private and government account has not only been high—about $20 billion or 80 per cent in real terms above the late 1920's—but also very stable. In each of the two recession years, 1949 and 1954, the supply increased.[5]

There would be little justification, however, on the basis of these facts to write off as solved the problem of the stability of the supply of dollars. In the first place, careful analysis has shown that while any recession-induced declines in the value of U.S. imports have been very small, at least in terms of annual data, there is no evidence to suggest that fluctuations in U.S. imports are now less closely associated with the U.S. business cycle than they were before the war. The declines in imports in the two postwar recessions do not seem to deviate much from the scatter of prewar recessions, the nature of which may be summarized in this approximate rule: when U.S. activity falls, the *volume* of imports declines by about the same percentage as the index of industrial production, and the *value* of imports declines about 1½ times as much.[6] The observed stability of imports has been a reflection of stability in the U.S. economy. There is no ground for believing that a U.S. depression would not have a strongly adverse effect on the supply of dollars.

Moreover, should a depression cut substantially into dollar earnings of foreign countries, too much hope should not be pinned on "countercyclical lending" to prevent a cumulative decline in world trade. This is not primarily because the resources that could become available through the International Monetary Fund, together with countries' own

[5] Data for 1955 that have become available since this paper was originally published show the total supply in that year at $21.8 billion, composed as follows: merchandise imports, $11.3 billion; private services and donations, $3.6 billion; U.S. private capital, $1.1 billion; government services, etc., $3.2 billion; and government loans and grants, $2.6 billion (all figures at 1954 prices). According to slightly revised figures for 1953 and 1954, the total dollar supply in those years is now estimated at $19.8 billion and $20.4 billion, respectively, against $19.6 billion and $20.0 billion as shown in the chart.

[6] Herbert K. Zassenhaus, "Direct Effects of a United States Recession on Imports: Expectations and Events," *The Review of Economics and Statistics*, Vol. XXXVII (August 1955), pp. 231–55. Industrial production declined by 6 per cent in the 1949 recession and by 7 per cent in the recession of 1953–54. This was accompanied by declines in the value of imports of 7 per cent and 9 per cent, respectively (International Monetary Fund, *Annual Report*, 1955, p. 26).

reserves, *could* not finance a substantial deficit of the rest of the world with the United States. The main reasons are that many, especially underdeveloped, countries might be unable to maintain income in the face of a sharp fall in exports, and that countries generally may be unwilling to indebt themselves heavily in order to keep up imports in a period of considerable uncertainty. Just as easy money will not by itself pull a country out of a depression, so the availability of even abundant international credit or reserves cannot be relied upon to avoid a sharp fall in world trade if a serious depression were allowed to develop in the United States.

If we may count on this not happening, and if accordingly we scale down the scope of our worries from the $5 billion problem to that of a decline in the supply of dollars in the order of $1 billion, we should not primarily concentrate attention on trade. There is at least an equally serious problem in the continuity of the export of U.S. capital; and the large fraction of the dollar supply accounted for by government payments makes the total supply at least as sensitive to political decisions as to minor cyclical fluctuations. Within the category of trade questions, attention needs to be paid also to problems other than cyclical variations in demand for imports. In a period when that demand is tolerably stable, variations in U.S. agricultural surplus policy, or in U.S. tariff policy, may be the chief elements of instability emanating from the U.S. economy.

# The Fund Agreement in the Courts—IV

Joseph Gold*

A NUMBER OF CASES involving the Articles of Agreement of the International Monetary Fund have been decided by courts in Belgium, Germany, and the United States since the publication of the last installment of this survey. These new cases are discussed here under two headings: gold transactions and the unenforceability of certain exchange contracts.

## Gold Transactions

In *National Bank of Belgium v. Bank of the Belgian Congo and National Committee of the Kivu*,[1] the First Chamber of the Belgian Court of Cassation dealt with the question of the legal price of gold in circumstances of unusual interest. The case involved the consideration of Article IV, Section 2, of the Fund Agreement, which was incorporated into Belgian law by the Law of December 26, 1945 approving the Final Act of the Bretton Woods Conference.[2]

The prices at which the National Bank of Belgium buys and sells gold are determined by the Bank under the authority of the Order of the Council of Ministers No. 6 of May 1, 1944.[3] Article 1 of this Order provides that:

> The National Bank of Belgium is authorized to buy and sell foreign currencies at the rates fixed by parity, payments, exchange, or compensation agreements, taking into account the expenses incurred in the purchase and sale of these currencies. Taking into account these rates of exchange, the National Bank of Belgium fixes the prices at which it buys and on occasion sells gold in bars or in coins. . . . The prices fixed by the National Bank of Belgium are submitted to the approval of the Minister of Finance.[4]

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[1] *Journal des Tribunaux* (Brussels), No. 4076, October 2, 1955, pp. 527–28.

[2] Loi portant approbation de l'Acte final de la Conférence monétaire et financière des Nations unies tenue à Bretton Woods du 1er au 22 Juillet 1944, *Moniteur Belge*, March 13, 1946 (Brussels), pp. 2157–58.

[3] See Joseph Gold, "The Fund Agreement in the Courts," *Staff Papers*, Vol. I (1950–51), pp. 322–23.

[4] "La Banque Nationale de Belgique est autorisée à acheter et à vendre des monnaies étrangères aux taux fixés par des accords de parité, de payement, de change ou de compensation, compte tenu des frais inhérents à l'achat et à la vente

On September 19, 1949, the National Bank's buying price was 49,145 francs per kilogram. This was based on the par value of 0.0202765 grams of fine gold per franc established by Belgium on December 18,1946 under the Fund Agreement, which is equivalent to 49,318.0822 francs per kilogram of gold. On September 18, 1949, the Fund concurred in the devaluation of sterling; and on September 19, the quotation of exchange rates was suspended in Belgium. On September 21, the Fund concurred in a change of the par value of the Belgian franc to 0.0177734 grams of fine gold per franc, which is equivalent to 56,263.7994 francs per kilogram of gold. On September 22, the quotation of exchange rates was resumed in Belgium, and on that day the National Bank, with the approval of the Minister of Finance, fixed a new buying price for gold of 56,065 francs per kilogram.[5]

The National Committee of the Kivu, an association of miners in the Belgian Congo, was required by law to sell the gold it produced to the Bank of the Belgian Congo. The latter Bank delivered such gold to the National Bank of Belgium and, in accordance with a custom that had been accepted by them, any delivery was regarded as an offer of the sale of the gold to the National Bank at its buying price on the delivery day. The acceptance of the National Bank was established by the statement of account that it then sent to the Bank of the Belgian Congo.

The present case involved two bars of gold weighing 25 kilograms. They were no doubt like all other bars of gold passing between the parties, but they happened to be delivered to the National Bank on September 20, 1949. The National Bank's statement of account, sent to the Bank of the Belgian Congo on the same day, was based on the price of 49,145 francs per kilogram.

The Bank of the Belgian Congo and the National Committee of the Kivu, relying on a number of legal provisions including the Order of May 1, 1944 and Article IV, Section 2, of the Fund Agreement, argued that the delivery on September 20 had not resulted in a contract of sale because of the absence of a price. It had not been possible to establish a price because of the suspension of the quotation of exchange rates. This argument succeeded in the Brussels Court of Appeal, but the judgment of that tribunal was reversed by the Court of Cassation.

The Court of Cassation held that there had been an official buying price for gold on September 20. A price established under the Order of May 1, 1944 remained applicable so long as a new one was not substituted

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de ces monnaies. Compte tenu de ces taux de change, la Banque Nationale de Belgique fixe les prix auxquels elle achète et éventuellement vend de l'or en barre ou en monnaies. . . . Les prix fixés par la Banque Nationale de Belgique sont soumis à l'approbation du Ministre des Finances."

[5] In the report in the *Journal des Tribunaux* (p. 527), the price is stated as 56,025 francs. It is believed that this is a typographical error.

for it. Article 1 of the Order provided that in fixing the price of gold the National Bank must take into account exchange rates for currencies as governed by international agreements. However, the drafters of the Order were only outlining the general principle on which the National Bank was to proceed in fixing the price of gold. They did not intend to establish so direct and necessary a relation between the price of gold and exchange rates that in the absence of the latter the former would cease to exist.

The Court then went on to consider whether Article IV, Section 2, of the Fund Agreement established this direct and necessary relationship:

> *Gold purchases based on par values.*—The Fund shall prescribe a margin above and below par value for transactions in gold by members, and no member shall buy gold at a price above par value plus the prescribed margin, or sell gold at a price below par value minus the prescribed margin.[6]

The Court concluded that the provision did not have this effect. What it did was to "impose only an upper limit for the buying price of gold; and such price, which can be fixed freely as long as it does not exceed the maximum prescribed, is not necessarily pegged to the par of currencies."[7]

The Court of Cassation was able to reach the conclusion that Article IV, Section 2, does not establish a necessary tie between the price of gold and the par values for currencies by concentrating solely on the position of the buyer of gold. It is true that under the provision a member may not buy gold at a premium or sell it at a discount in terms of the par values of currencies, which suggests that it may sell at a premium or buy at a discount. If a member could always purchase at a discount, it would then be true that the prohibition of purchase at a premium means, as the Court of Cassation said, that the provision prescribes only a maximum price in terms of par values but otherwise creates no tie to them. However, a very different picture emerges if the position of the seller of gold is also taken into account. If both seller and buyer are Fund members and therefore subject to Article IV, Section 2, it will not be possible to depart from par values, save for the permitted margins, in gold transactions to which they are both parties. For although the buying member may buy at a discount, the selling member will not be able to sell to the buyer at such a price; and although the selling member may sell at a premium, the buying member will not be able to buy from the seller at that price. Therefore, in transactions between parties to whom Article IV, Section 2, applies, the price of gold is intimately tied to par values. The rationale of the provision then becomes apparent.

[6] The margin is prescribed in Rule F-4 of the Fund's Rules and Regulations.
[7] *Journal des Tribunaux*, p. 528.

It is to prevent the undermining of par values for currencies by those gold transactions at nonparity prices that would be most likely to have that effect, i.e., gold transactions between members, and particularly the monetary authorities of members.[8]

It is submitted with respect that the Court of Cassation's formulation of the effect of Article IV, Section 2, was too general a proposition and that it was, therefore, a dubious basis for decision. In describing the effect of the provision, the Court appears to have been thinking of all transactions covered by it and not simply the transaction in issue. It would be interesting to speculate whether even in that transaction the parties were free to establish a price unrelated to the par value for the Belgian franc. The question arises because the buyer, the National Bank, is the central bank of Belgium; and in 1949 the seller, the Bank of the Belgian Congo, performed certain central banking functions in the Belgian Congo, a territory in respect of which Belgium has accepted the Fund Agreement under Article XX, Section 2(g).[9] However, there is no need to proceed with this inquiry, because it would be pertinent only if the parties had departed from the parity price. It will be seen from the rest of this discussion that they had not.

The doubt that has been expressed as to the Court's treatment of Article IV, Section 2, must not be understood to imply that a different result should have been reached. The line of reasoning adopted by the Court was that the price of gold is not tied to par values because members have a discretion, subject to a maximum, in fixing the buying price. The reasoning suggested here is that under Article IV, Section 2, the price of gold is tied to par values in the transactions that are most likely to have an effect on par values, but that, whether or not there was a legal discretion to depart from the price based on the par value for the Belgian franc in this case, it had not in fact been departed from. It will

[8] It is not clear why Article IV, Section 2, is so drafted that certain gold transactions at prices departing from par values are possible under the provision. All nonparity gold transactions between members are caught by the provision; and so, too, are purchases at a premium and sales at a discount by a member in transactions with private parties or nonmembers. However, sales at a premium and purchases at a discount by a member in transactions with private parties or nonmembers are outside the prohibitions of the provision. (For the legislative history, see the references in *Staff Papers*, Vol. II, 1951–52, footnote 25, p. 495.) It is possible that the drafters contemplated that domestic sales at a premium or domestic purchases at a discount by members might again be useful in some countries as counterinflationary or counterdeflationary policies, as they had been during the war. For the Fund's policies on transactions at premium prices, whether prohibited by Article IV, Section 2, or not, see its *Annual Report, 1947*, pp. 78–79, and *1950*, pp. 70–71 and 90–95.

[9] For a Fund action based on the application of Article IV, Section 2, to a territory covered by Article XX, Section 2(g), see the case of Southern Rhodesia, in respect of which the United Kingdom had accepted the Fund Agreement. The transactions there, however, were between the monetary authorities of the territory and private parties. See International Monetary Fund, *Annual Report, 1949*, pp. 36–37.

be recalled that the price at which the transaction was carried out was based on the par value for the Belgian franc which had been agreed with the Fund on December 18, 1946 and not changed until after the gold transaction in question. In its *Annual Report, 1951*, the Fund declared:

> A member of the Fund cannot, within the terms of the Articles of Agreement, abandon a par value that has been agreed with the Fund except by concurrently proposing to the Fund the establishment of a new par value. What a country can do under the circumstances described above is to inform the Fund that it finds itself unable to maintain rates of exchange within the margins of its par value prescribed by the Fund Agreement, and, accordingly, that it is temporarily unable to carry out its obligations under Sections 3 and 4(b) of Article IV.[10]

This means, of course, that notwithstanding the suspension of exchange rate quotations on September 19, 1949 the par value for the Belgian franc previously agreed with the Fund remained the par value consistent with the Fund Agreement until the new par value was agreed with the Fund on September 21. In short, it was open to the Court to take the same position with respect to Article IV, Section 2, as it had taken with respect to Order No. 6 of May 1, 1944. Under the Fund Agreement, the par value agreed with the Fund was not displaced until a new one was established, just as under Belgian law the buying price for gold fixed under the Order remained the ruling price until a new one was adopted. Therefore, since the price in the September 20 gold transaction was based on the only par value that had been agreed with the Fund, that price was necessarily consistent with Article IV, Section 2.

## Unenforceability of Certain Exchange Contracts

There have been five cases since mid-1953 in which courts in the United States, Belgium, and Germany have dealt with Article VIII, Section 2(b), of the Fund Agreement, and there has also been a decision by a U.S. administrative agency. Article VIII, Section 2(b), is the now famous provision in which the first sentence declares that:

> Exchange contracts which involve the currency of any member and which are contrary to the exchange control regulations of that member maintained or imposed consistently with this Agreement shall be unenforceable in the territories of any member.[11]

It will be seen from the discussion of these new cases that the courts are now more willing than they were at one time to unravel the complexities of this novel provision.

[10] P. 40; see pp. 36–41 for a full discussion.

[11] This provision has been discussed in the following issues of *Staff Papers:* Vol. I (1950–51), pp. 323–33; Vol. II (1951–52), pp. 490–94; Vol. III (1953–54), pp. 303–8; Vol. IV (1954–55), pp. 330–38.

THE NEW YORK CASES

All three of the U.S. cases were decided in the courts of New York. The first, *de Sayve v. de la Valdene*,[12] decided by the Supreme Court, the court of first instance in New York, has some bearing on the concept of exchange control regulations. In a contract entered into between Frenchmen in France, the defendant undertook to pay a certain sum in U.S. dollars and another sum in sterling. Part of the defendant's case was based on laws reviving the *cours forcé* in France which had been adopted after the making of the contract. This legislation had been interpreted by the French courts to mean that clauses in domestic contracts for payment in gold or foreign currency, even though entered into before the enactment of *cours forcé* legislation, are against public policy and cannot be discharged in the manner contracted for. The New York court had to consider whether it was bound to give effect to this aspect of French law. New York courts will not give effect to certain foreign statutes of a public policy character, such as foreign penal or revenue laws, but will now give effect in some circumstances to foreign exchange control laws. The court inclined to the opinion that the *cours forcé* legislation was an expression of French public policy that it was not required to enforce, but in the circumstances of the case found it unnecessary to decide this point. What is of particular interest for the present purpose is that no effort seems to have been made to place the French *cours forcé* legislation in the category of foreign exchange control laws. According to the court, "it is here conceded that the French statutes here involved are not 'exchange control laws' of the type which the Bretton Woods Agreements now make enforceable. See Perutz v. Bohemian Discount Bank in Liquidation, 304 N.Y. 533, 537, 110 N.E. 2d 6, 7."[13]

In the second case, *In re Sik's Estate*[14] decided by the Surrogate's Court, D filed a claim in the administration of the New York estate of the deceased S. It was based on an agreement made during the German occupation of Yugoslavia, where they were then both resident. Under the contract S promised to pay dollars from his New York account to D at a specified rate of exchange as soon as possible after the war in return for advances of Yugoslav currency which D had made to S. The New York administrator of S's estate contended that the contract was in violation of the exchange control laws of Yugoslavia and therefore void.[15] These exchange control laws had been in force for about a decade

[12] 124 N.Y.S. (2d) 143 (1953).
[13] 124 N.Y.S. (2d), p. 153.
[14] 205 Misc. 715, 129 N.Y.S. (2d) 134 (1954).
[15] It should be made clear that the controversy really involved the question of the appropriate rate of exchange and not whether D should be denied all recovery. If the contract was void, S's estate would be liable on the basis of unjustified en-

before the occupation, and were not substantially changed during or immediately after the end of the occupation. However, expert witnesses disagreed on whether, at the time of the contract, these laws remained operative or had become inoperative although not repealed. The laws provided that for a contract of the kind between D and S the consent of the Yugoslav Minister of Finance was necessary. This consent had not been sought because the lawful authorities were in exile, and it would have been disastrous for the parties to apply to the occupation authorities.

The Surrogate's Court held that the basic question was the essential validity of the contract, and this was to be determined by the law which the parties intended to have govern their contract, provided that there was a reasonable connection between that law and the contract. In accordance with this test, the court found that New York law applied, and that under this law the contract was valid. However, this was not sufficient for the purpose of reaching a decision and, notwithstanding the conclusion that the validity of the contract was governed by New York law, the court went on to examine the position under Yugoslav law:

> It is argued that because the United States and Yugoslavia are members of the International Monetary Fund established by the Bretton Woods Agreement Act, we must recognize and uphold the foreign exchange regulations. See, Perutz v. Bohemian Discount Bank in Liquidation, 304 N.Y. 533, 537, 110 N.E. 2d 6, 7. It is a general rule of law that a bargain, the performance of which involves a violation of the law of a friendly nation, is illegal. (Restatement of Contracts, § 592; 6 Williston on Contracts, § 1749.) However, the contract made in Yugoslavia would violate the regulations only if it were made without the license from or permission of the Minister of Finance. Even if the regulations were still in effect, it was impossible to make the appropriate application because the authorities were not able to function. Under such circumstances, failure to obtain a license before making the contract does not render the contract unenforceable. Meade v. Lamarche, 150 App. Div. 42, 134 N.Y.S. 479. The objectant [D] is no longer a resident of Yugoslavia. The decedent [S] died during the persecution and his estate is under the supervision of this court. It is not necessary now to obtain permission of the foreign government to pay the claim which is valid under our law.[16]

This passage represents an extension of principle beyond the *Perutz* case,[17] the leading New York case in this field so far, and a closer approach to the application of the principles of the Fund's authoritative interpretation of Article VIII, Section 2(b).[18] According to that interpretation, if the exchange control regulations of a member fall within the

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richment. The rate of exchange would then be, not the 95 dinars to the dollar provided for in the contract, or the approximately 50 to the dollar prevailing at the time of making the contract, but the approximately 300 to the dollar current at the date of the action.

[16] 129 N.Y.S. (2d), pp. 138–39.

[17] *Staff Papers*, Vol. II (1951–52), pp. 490–92; Vol. III (1953–54), pp. 303–8.

[18] *Staff Papers*, Vol. I (1950–51), pp. 326–27.

provision, they must be recognized by the judicial or administrative authorities of other members, and recognition does not depend on a finding that the member's law of which the regulations form part is the governing law under the traditional private international law of the forum. Before the Fund Agreement, a court would be likely to proceed as follows in accordance with its traditional private international law. The effect of the exchange control regulations of another country on a contract that had contacts with other countries was a question of the validity of the contract; and it was to be decided by reference to the law regarded by the private international law of the forum as the governing law. This might be the law of the place where the contract was made, or the law of the place where the contract was to be performed, or the law intended by the parties to be applied, or some other system of law. But whatever the rule with respect to the governing law might be, it would be possible to recognize the effect of the exchange control regulations of another country only if the regulations were part of the law selected by the forum as the governing law. In the *Perutz* case, the technique followed by the New York court was this familiar one of deciding what was the governing law under New York private international law. The court found that the contract was governed by Czechoslovak law, and hence Czechoslovak exchange control regulations were recognized. Nothing was said as to what the position would have been if Czechoslovak law had not been the governing law under the private international law of New York. It is on this point that the *Sik* case becomes significant. Having found that New York and not Yugoslav law was the governing law, the Surrogate's Court was nevertheless willing to consider the effect of the Yugoslav regulations on the contract.

It is true that the court did not proceed, in either the *Perutz* or the *Sik* case, on the thesis that within its field Article VIII, Section 2(b), has changed certain pre-existing rules of private international law, so that now the inquiry should be, not whether private international law, but whether the provision requires the recognition of exchange control regulations. In both cases, the approach was via private international law, and the inquiry was whether the exchange control regulations were part of the law regarded by the private international law of the forum as the governing law. In the *Perutz* case the Fund Agreement was then relied on by the court as authority for the proposition that it could not, on the ground of public policy, withhold recognition of regulations forming part of the governing law. In the *Sik* case, however, the Fund Agreement was the means by which the inquiry was carried beyond the governing law to the law of another Fund member, a member that had exchange control regulations affecting the contract. Although even this broad approach is not yet the approach of the Fund's interpretation,

theoretically at least the results should be the same.[19] That is to say, neither approach would result in the enforcement of an exchange contract that was contrary to exchange control regulations maintained or imposed consistently with the Fund Agreement.

The third New York case, *Stephen v. Zivnostenska Banka National Corporation*,[20] decided by the Supreme Court, involved an attempt by the plaintiffs to throw the assets of the defendant bank into receivership under Section 977-b of the New York Civil Practice Act on the premise that the plaintiffs were the creditors of a foreign nationalized institution. Because of the variety and complexity of the issues, the entire matter had been assigned to a referee for examination and report. The court confirmed the referee's report except on two points, one of which related to the Fund Agreement and was ruled on by the court as follows:

> Regarding the second exception, that relating to the plaintiffs' standing as creditors, as influenced by the International Monetary Fund Agreement, the referee noted the membership of Czechoslovakia in the International Monetary Fund, and considered particularly that portion of Article VIII, section 2(b), of the Fund Agreement:
>
> "Exchange contracts which involve the currency of any member and which are contrary to the exchange control regulations of that member maintained or imposed consistently with this Agreement shall be unenforceable in the territories of any member."
>
> He therefore concluded that the plaintiffs could not obtain relief in this court. Perutz v. Bohemian Discount Bank in Liquidation, 304 N.Y. 533, 110 N.E. 2d. 6.
>
> However, he did state, and with mindful foresight, that this phase could be reopened if Czechoslovakia ever withdrew, voluntarily or otherwise, from the fund organization. Such circumstances actually occurred on January 5, 1955, when the International Monetary Fund issued a release that Czechoslovakia was no longer a member. . . .
>
> No valid reason currently exists to frustrate our public policy, as expressed in the controlling statute, and thereby allow Czechoslovakia to take advantage of one of the privileges of fund membership when it is no longer a member. . . .
>
> Accordingly, the present status of Czechoslovakia in relation to the International Monetary Fund does not bar the plaintiffs in this action.[21]

The most significant aspect of this case is its relation to a problem which has been discussed in an earlier contribution to *Staff Papers*.[22] In that article, disagreement was expressed with the view, advanced by at least one author, that the date as of which it must be determined whether an exchange contract is contrary to exchange control regulations for the purposes of Article VIII, Section 2(b), is the date of the making of the contract and not the date at which performance is due. It was

[19] For an interesting discussion of the *Sik* case, see Michael H. Cardozo, "International Law in the New York Courts—1954," *Cornell Law Quarterly* (Ithaca), Vol. 40 (1955), pp. 547–60.

[20] 140 N.Y.S. (2d) 323 (1955).

[21] 140 N.Y.S. (2d), pp. 326–27.

[22] Vol. IV (1954–55), pp. 332–36.

pointed out that one of the anomalies produced by this view would be that members of the Fund would have to continue to treat a contract as unenforceable even though the exchange control regulations that had not been observed at the time of making were those of a country that had ceased to belong to the Fund before performance. This would be a surprising result and difficult to reconcile with the freedom of action that members have retained under Article XI with respect to non-members. The case foreseen has now arisen, and it has been decided in a way which is consistent with the view that the facts that determine whether an exchange contract is unenforceable under Article VIII, Section 2(b), are those at the date for performance of the contract and not those at the date of its making.

Another notable feature of the *Stephen* case is that the referee at least seems to have regarded the *Perutz* case as decided on the basis of Article VIII, Section 2(b). The decision of the Court of Appeals in the *Perutz* case did not make this clear but referred only in a general way to the effect of membership of the United States and Czechoslovakia in the Fund. Clarification of the basis of the decision in the *Perutz* case might have a bearing on the question whether the Fund Agreement has produced two rules for the recognition by members of the exchange control regulations of other members, one express and the other implied. The express rule, of course, would be the one laid down in Article VIII, Section 2(b). It would not depend on any finding that the regulations are part of the governing law under private international law, but it would be confined to cases involving exchange contracts. The implied rule would not be based on Article VIII, Section 2(b), or any other specific provision, but would derive from the Fund Agreement as a whole. This rule would apply whenever the law of which the regulations are part is the governing law as determined by private international law, but there would be no good reason for confining it to contracts, whether of the "exchange" or any other variety. It would apply to any situation, such as the distribution of a decedent's estate, in which the governing law includes exchange control regulations that affect the issue. In these cases, the implied rule would mean that the regulations are no longer refused recognition on the ground of public policy or some similar consideration.

The decision by the Director of the Office of Alien Property of the U.S. Department of Justice on a petition for review *In the Matter of Heddy Brecher-Wolff*[23] is relevant to this question. The Attorney General had found that certain shares in a Montana corporation belonged to E, a citizen and resident of Germany, whereupon the shares were vested in the Attorney General under U.S. enemy property legislation. The

[23] Title Claim No. 41668, Docket No. 1698.

claimant B, a U.S. citizen, contested this vesting on the ground that the shares had been sold to her by E in February 1941, at which time B too was resident in Germany. In resisting B's claim, it was argued that the sale was illegal under German exchange control legislation which had been adopted in 1931 and substantially re-enacted in 1932, 1935, 1938, 1946, and later. It was held that, under private international law, the transaction between E and B was governed by German law. B had argued that, notwithstanding this, German exchange control legislation should be ignored because it was confiscatory, penal, and against U.S. public policy. The Director found that:

> International recognition of foreign currency control legislation was assured by the adoption of the International Monetary Fund Agreement in which more than 50 nations are now participants. By virtue of the Bretton Woods Agreement Act of 1945 . . . the United States became a party and in 1952 West Germany became a member as well.

The Director also noted that the Fund's interpretation of the effect of Article VIII, Section 2(b), on public policy had been upheld in the *Perutz* case. On the argument that the Fund Agreement did not apply because it was not retroactive, he ruled:

> It is not necessary to decide this question. It is sufficient to point out that by adherence to the Agreement, the United States has taken the position that foreign currency controls are not inherently penal or confiscatory and that recognition of such controls is not offensive to public policy.

Thus, there was nothing offensive in exchange control as such, and there was nothing to show that in this case it had been applied in a discriminatory or confiscatory way. Therefore, its effect must be recognized, and B's claim failed.[24]

The decision clearly supports the proposition that the Fund Agreement has produced a second principle of recognition by members of the exchange control regulations of other members. The Director did not decide whether Article VIII, Section 2(b), applied, but held nevertheless that because of the Fund Agreement he must recognize the exchange control legislation of the legal system which was the governing law under private international law.

### The Courtrai Case

The Belgian case[25] was decided by the Commercial Tribunal of Courtrai. The Belgian plaintiffs had granted the Dutch defendants the exclusive right in the Netherlands to exploit an invention, a method for manufacturing cork soles, against payment of three Belgian francs for

[24] Cf. *Re Helbert Wagg & Co. Ltd.* (1956) 1 All E.R. 129.
[25] Unreported.

each pair of soles. In an action by the plaintiffs for breach of this contract, the defendants relied, in part, on the argument that the contract was void under Dutch exchange control regulations because they had not obtained the license required by those regulations. The court held that Belgian law governed the contract. However, the defendants argued that Article VIII, Section 2(b), was part of Belgian law, and that it required recognition of the Dutch regulations. The court was willing to accept this as a general proposition:

> Considering that according to one doctrine and line of jurisprudence such a law is political, having a purely local character without effect abroad, and that according to other opinions such a law is in conflict with the public policy of other countries; that in the majority of cases foreign tribunals have rejected such legislation and have considered it inapplicable;
>
> Considering, however, that a contractual recognition of such legislation as defendants claim was effected by the Belgian ratification of the Bretton Woods Agreements containing the provision of Article VIII, 2(b) constitutes a deviation from this almost general rule, so that contracts infringing these monetary laws which are a part of the public policy lack any legal validity. . . .[26]

Two aspects of this statement should be noted. First, the court did not appear to be limiting recognition of exchange control legislation under the provision to those cases in which it is part of the governing law under the private international law of the forum. This becomes more apparent when it is remembered that the court found that the governing law was Belgian but that the effect of Dutch exchange control must be considered. The attitude of the Courtrai court thus resembles that of the New York court in the *Sik* case. Secondly, the effect of the provision is said to deprive the contract of "any legal validity," a phrase which on its face value would go beyond unenforceability.[27]

Having shown its willingness to endorse the general principle of law relied on by the defendants, the court then went on to lay down six reasons why it was prevented "from accepting the absolute voidness of the contract." These were as follows.

(1) Although the particular regulation of the Netherlands relied on by the defendants provided that the contract should be void, other regulations could not be reconciled with this sanction. For example, a party could apply for a license after the conclusion of the contract, and the Netherlands Bank could grant it.

(2) Article VIII, Section 2(b), dealt with "foreign exchange contracts involving the currency of a member," but there was no general agreement that this category included "a normal international contract involving commodities and payable in money."

(3) Article VIII, Section 2(b), established a rule with respect to

[26] Translated from the Flemish original.
[27] See *Staff Papers*, Vol. IV (1954–55), pp. 331–32.

foreign exchange control regulations maintained or imposed consistently with the Fund Agreement, but the defendants had failed to prove that the Fund had confirmed the Netherlands regulation on which the defendants relied.

(4) The Belgian courts considered foreign law as a fact. The defendants, therefore, had to prove that the law they invoked was the latest foreign legislation, but this also they had failed to do.

(5) The purposes of the Fund Agreement were to promote the stability of currencies, the free flow of capital, and international trade. The Dutch decree conflicted with these purposes and was inspired by Dutch self-interest. Thus, the policy on which it rested could have legal validity only after confirmation by the Fund.

(6) Under the Dutch regulation, all international contracts concluded without prior license were void, and the Netherlands Bank, if subsequently requested to grant a license, could decide in its sole discretion whether or not to grant one according to whether the Dutch resident would lose or gain thereby. This was "in violation of international public policy."

For these reasons, and also because the defendants had filed an application with the Netherlands Bank in terms which would necessarily encourage the Bank to refuse a license for "egoistic motives," the court held that the defendants' argument that the contract was void must fail, and appointed an expert to take an accounting.

Some of the reasons relied on by the court involve basic problems of the interpretation of Article VIII, Section 2(b). The first reason suggests that the application of Article VIII, Section 2(b), depended on a finding that an unlicensed contract was void under the Dutch regulations, and that if it was void under those regulations it would then be treated as void under the provision. However, the provision speaks of exchange contracts that are "contrary to" exchange control regulations, and declares that they shall be "unenforceable." Neither of these two concepts is the equivalent of voidness.

As for the second reason, the language of the provision, "exchange contracts which involve the currency of any member," is admittedly obscure. However, there is a strong current of opinion in favor of a liberal interpretation which would readily embrace contracts for the sale of goods for money.[28]

The third and fourth reasons assume that Article VIII, Section 2(b), will not be given effect unless a defendant pleads and proves the ex-

[28] See, for example, B. S. Meyer, "Recognition of Exchange Controls after the International Monetary Fund Agreement," *Yale Law Journal* (New Haven), Vol. 62 (1953), pp. 885–88; F. A. Mann, *The Legal Aspect of Money* (London, 2nd ed., 1953), pp. 381–82.

change control regulations which his contract has failed to observe[29] and also the application of the provision to them. This view rests upon the classical principle that foreign law must be proved as a fact. However, it has been doubted that this principle can work satisfactorily when applied to Article VIII, Section 2(b). The provision was intended to protect the interests of Fund members, and this protection, it has been pointed out, should not be frustrated by the accidental or intentional failure of litigants to prove exchange control regulations.[30]

In its third and fifth reasons the court held it necessary for the defendants to prove that the Fund had confirmed the Dutch regulations on which they relied. It should be noted that Article VIII, Section 2(b), refers to exchange control regulations that are "maintained or imposed consistently with this Agreement." The main source of postwar exchange control regulations has been Article XIV of the Fund Agreement, under which members are authorized to "maintain and adapt to changing circumstances (and, in the case of members whose territories have been occupied by the enemy, introduce where necessary) restrictions on payments and transfers for current international transactions." In other words, in this provision, as well as in some other provisions of the Agreement, there is standing authority for members to have certain exchange control regulations without the necessity for members to get confirmation from the Fund of specific regulations within the scope of that authority.

Much more could be written of this interesting case, but discussion here must cease with one last comment. One of the most difficult aspects of Article VIII, Section 2(b), is the interpretation to be given to the words "involve the currency of any member." There will be further reference to this problem in connection with the German case, but it should be observed now that the question before the Belgian court was the recognition of Dutch exchange control regulations in connection with a contract providing for Belgian franc payments. If the Belgian court had thought that the currency of the Netherlands was not "involved," would it have omitted this objection to the defendants' case from the long list of objections that it did set forth?

### THE HAMBURG CASE

The German case[31] was decided by Chamber 12 for Commercial Affairs of the Hamburg Landgericht. The defendants, who were Belgian

[29] Cf. *Re Mason's Estate*, 194 Misc. 308, 86 N.Y.S. (2d) 232 (Surrogate's Court, New York County, 1948); *Roach v. Welles*, 127 N.Y.S. (2d) 138, p. 139 (Sup. Ct., 1954).

[30] G. R. Delaume, "De l'élimination des conflicts de lois en matière monétaire réalisée par les statuts du Fonds Monétaire International et de ses limites," *Journal du Droit International* (Paris), Vol. 81 (1954), pp. 356–60. See also F. A. Mann, *op. cit.*, p. 385.

[31] Unreported.

residents, entered into an agreement with the plaintiffs, a Hamburg firm, for the purchase from the latter of 500 tons of sulphate of ammonia at 46 U.S. Clearing Dollars per 1,000 kilograms, payment to be made under Belgian-West German Clearing. The defendants failed to obtain an import license from the Belgian authorities, and the plaintiffs brought this action because of the defendants' failure to take up the goods. There was some question whether the grant of an import license was a condition of the contract, but the court held that it was unconditional. Nevertheless, it decided that the action must fail. The basis for this decision was Article VIII, Section 2(b), with the niceties of which the court showed a notable familiarity.

The recognition of Belgian controls pursuant to the provision was not preceded by any discussion of the governing law under German private international law. There was thus no finding that Belgian controls would be recognized because Belgian law was the governing law.[32] The decision can be regarded, therefore, as the clearest application to date of the statement in the Fund's authoritative interpretation of the relationship between Article VIII, Section 2(b), and private international law. It is true, as already noted, that theoretically there should be no difference in result between immediate consideration of the exchange control regulations that are relevant under the provision and consideration of them at a later stage after what is, under the provision, an unnecessary determination of the governing law under private international law. Whatever the approach, there would be no enforcement of a contract declared unenforceable by the provision. Nevertheless, it is worth noting, without trying to insist on any moral, that in the *Sik* and Courtrai cases, in which the second approach was used and the governing law was found to be the *lex fori*, the results did not give effect to the foreign exchange control regulations; whereas in the Hamburg case, in which the first approach was followed, effect was given to them.

Another feature of the Hamburg decision is that there was no discussion of the question whether the category of "exchange contracts" includes contracts for the sale of commodities for money. It will be remembered that this was thought to be an open question by the Courtrai court, but the Hamburg court had no trouble with it at all. On the other hand, the Courtrai court spent no time on the question whether the currency of the Netherlands was "involved" in a contract for payment in Belgian francs, whereas the Hamburg court expressly found that the *foreign exchange holdings or the currency of Belgium* was involved. This language is important because, taken with the court's references to Dr. Mann's views on other aspects of the provision,[33] it suggests an

[32] On the issue of whether there was an unconditional contract, the court held that this was to be decided by German law and that there was no case for taking Belgian law into account.

[33] The express references in the opinion are to F. A. Mann, "Der Internationale

acceptance of his view on the currency involved which he has expressed as follows:

> Exchange contracts "which involve the currency of any member" are, it is suggested, contracts which affect the currency resources of any member. It follows from what has been said above that it is not so much the denomination in a particular currency that matters, but the prejudicial effect which a transaction may have upon a member State's financial position and which, by international cooperation, the members have agreed to preclude. Gold, securities of whatever denomination, even land, movables, or intangibles may be the subject of exchange control and their transfer may "involve the currency" of a member. There is no reason why, in a document of this kind, "currency" should not be construed in the broad sense of economics rather than in a strictly legal sense.[34]

In this case the contract referred to U.S. dollars but provided that payment was to be made under clearing arrangements, i.e., in accordance with the Payments Agreement between the Federal Republic of Germany and the Belgian-Luxembourg Economic Union which had been entered into pursuant to the European Payments Union (EPU) Agreement. This meant that, if exchange control regulations permitted payment, the defendants, although not allowed even then to pay dollars, could elect to pay either Belgian francs or German marks. It is thus arguable that even on the narrow view that has been advanced of the currency involved, namely the currency payable, Belgian currency was involved.[35] On the broad view, there can be no doubt that, as the result of the Payments Agreement and the EPU Agreement, Belgian currency was involved and would have been involved even if the contract had provided for payment in nothing but German marks.

The plaintiffs in this case advanced a new interpretation of the currency involved. It was an ingenious variation of the so-called narrow view. The latter, it has been seen, means that if an exchange contract is contrary to Belgian exchange control regulations, Article VIII, Section 2(b), will apply only if the contract calls for payment in Belgian currency. The plaintiffs, however, argued that, because there must be a "foreign exchange contract" from the standpoint of Belgium, the provision will *not* apply if the currency of payment is Belgian francs. This, they argued, was the situation here, presumably because they believed that the defendants would have paid in Belgian francs.[36] The argument did not succeed.

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Währungsfonds und das Internationale Privatrecht," *Juristenzeitung* (Tubingen), Vol. 8 (1953), pp. 442–46 (referred to in later footnotes as *JZ*).

[34] *The Legal Aspect of Money* (London, 2nd ed., 1953), p. 382, and *JZ*, p. 444.

[35] See, for example, A. Nussbaum, *Money in the Law, National and International* (Brooklyn, 2nd ed., 1950), pp. 543–44.

[36] The court's opinion does not refer to the plaintiffs' argument in detail. It is possible that they had also argued that, even if the defendants had intended to pay in marks, they would have had to purchase them with francs.

The court also considered the question whether the Belgian regulations that affected the contract were exchange control regulations. It did not appear to be unduly bothered by the fact that the basic regulation was one requiring the defendants to get an import license for goods coming from East Germany, which in itself sounds more like a trade than an exchange control regulation. What the court relied upon, however, was the fact that the refusal of a license was for the purpose of preventing payment under German-Belgian clearing arrangements. The court thus regarded the contract as contrary to the exchange control regulations which established the clearing arrangements.

This led to the next question. Were those regulations maintained in conformity with the Fund Agreement? Article VIII, Section 2(b), it will be remembered, refers to exchange control regulations "maintained or imposed consistently with this Agreement." The court did not think, as the Courtrai court had, that this meant that an express approval by the Fund of the particular regulations must be demonstrated. On the other hand, it did not attempt to determine which provision of the Agreement authorized the regulations. In its view, the general character of the regulations must be authorized,[37] and that this test was satisfied could be inferred from the fact that similar exchange control regulations existed in almost all countries.

After this analysis, the court concluded that the contract was devoid of effect. It took this to be the meaning of "unenforceable" on the ground that the members of the Fund cannot be presumed to have intended the special meaning of a valid but not enforceable contract which the word has in Anglo-American systems of law. The other reason given by the court for its understanding of "unenforceable" is in strong contrast to the opinion of the Courtrai court that litigants must prove the exchange control regulations of other countries. The Hamburg court objected to the "Anglo-American" view of "unenforceable" because this would mean that it would be left to the discretion of the parties to a contract to invoke regulations that existed in the public interest. There is no need to comment at length on this aspect of the provision, because the issue as to the precise meaning of the word did not affect the outcome of the case, and because there has been a fuller discussion elsewhere.[38] It is sufficient to point out that there is no reason why the concept of a contract as a valid one which judicial or administrative authorities will not help to enforce must carry with it the proposition that it is left to contracting parties to plead and prove such unenforceability.

One further problem had to be resolved. If a claim for performance of

[37] Cf. F. A. Mann, *The Legal Aspect of Money* (London, 2nd ed., 1953), p. 384, and *JZ*, p. 445.

[38] The court relied upon the views of Dr. Mann (*JZ*, p. 445); these are considered in *Staff Papers*, Vol. IV (1954–55), pp. 331–32.

a contract is excluded by Article VIII, Section 2(b), can the court award damages for non-performance? This question has not been considered in the other cases that have dealt with the provision. The Hamburg court held that the claim for damages also must fail. If damages were awarded, even though the merchandise had not been received in Belgium, the foreign exchange position of that country would be even more adversely affected. Moreover, the contrary conclusion would give full latitude to attempts to circumvent the provision. The court's position was thus consistent with the Fund's authoritative interpretation, which declares that "... the obligations of such contracts will not be implemented by the judicial or administrative authorities of member countries, for example, by decreeing performance of the contracts or by awarding damages for their non-performance."